

Dr Joseph A. Eve
P. 1000

Sept 18

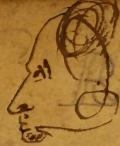
Joseph A. Eve
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Joseph A. Over M.D.

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Augusta July 15th 1869

Mr. Hughes Esq

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J. A. Eve

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G. H. Holcombe

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Notes

Practice taken
from
the

Lectures of Lewis, R. Ford M. D.
Professor of the Practice and Institutes
of Medicine.

in
The Medical College of Georgia.

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Joseph A. Eve 17 years ago

Joseph A. Eve

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Dr Thomas Burdell
at Mr Phinneys

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Dr Joseph A Eve

Miss Mary
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Q. When different Tissues of the human system are diseased, are the symptoms indicative of disease also different?

A. They are. The symptoms are modified by a diseased state of each particular tissue.

Q. Will a knowledge of the symptoms of each diseased tissue suffice?

A. No, sir. The symptoms of the organ diseased.

Q. Does it frequently occur that a tissue entering into an organ composed of several tissues, is diseased while the others are healthy?

A. Yes. Each of the four coats of the stomach may be separately diseased.

Q. Are the symptoms of particular Tissues invariably the same?

A. Tissues similarly situated - when affected by disease of the same nature & intensity give the same symptoms.

Q. Define Life?

A. It is the action of Stimuli on the various organs of our system.

Q. Is it essential to the performance of the functions of any organ that a physical agent should act on it?

A. It is.

Q. Can you prove that the action of a physical agent is necessary to the performance of voluntary motion?

A. By cutting off by a ligature all vascular & nervous communication motion is destroyed.

Q. What then is essential to action in the human system?

A. A physical agent & an organized excitable surface.

Q. Can the term Functional be correctly applied to diseases?

A. No. All diseases are organic.

Q. Name two Terms in medical language that have been very much abused by abstractly using them?

A. Sensibility & Contractility.

Q. In inflammation when there is redness and pain, "is saying" the sensibility of the part is exalted" expressive of anything more than, to say, "the red colour of the part is exalted"?

A. No, Sir.

Q. Will the animal organization admit of being studied as the physical sciences are?

A. Yes.

Q. Define Health?

A. That state of the system resulting from perfect organization and action of all the parts.

Q. Do Animals take their food and medicine differently in the degree of action?

A. No. Medicine is not assimilated.

Q. In all diseases, there are two elements or orders of phenomena. What are they?

A. 1st a physical alteration of the organization & 2^d altered functions.

Q. Define Disease?

A. It implies an increased or diminished action or want of action in one or more organs.

Q. What is Pathology?

A. The doctrine or nature of Disease.

Q. Is the help of pathological anatomy limited to post mortem examinations?

A. No Sir. It embraces the study of the nature &

seat of disease by all physical signs, as by the microscope, percussion and auscultation &c.

2. Could you without the aid of Pathological Anatomy, be able by Physiology & the symptoms of disease to determine the seat of all diseases?

A. No sir. Distant organs sometimes give the stronger symptoms than one affected immediately.

3. To what is the science of medicine chiefly indebted for its present exactness and perfection?

A. Pathological Anatomy.

4. Are there not periods in disease, when you cannot be aided by Pathological Anatomy, in investigating their pathology?

A. In the incipience of most diseases.

5. Are there not diseases in which you cannot be aided by it in your study?

A. Diseases of the nervous system.

6. Upon what, then, would you rely for a correct pathology & successful treatment in many diseases?

A. Observation and reason.

7. Would a precise knowledge of the physical alteration in the tissue, or organ generally suggest an appropriate remedy?

A. No Sir.

8. What is meant by symptoms of disease?

A. Unnatural or morbid appearances which exist with a diseased state.

9. What is the study of symptoms called?

A. Symptomatology.

10. How are symptoms divided?

A. Common and proper.

11. What are common symptoms?

A. Those not peculiar to any disease, but occur in

different diseases.

2. What are proper symptoms?

A. Those which appear only when a particular part is in a particular state.

3. What are the symptoms denominated proper generally called?

A. Stigmata or Pathognomonia.

4. What is meant by semiology?

A. Reasoning upon the interpretation of making symptoms significant of the physical change.

5. Is semiology entitled to the name of science?

A. Yes Sir.

6. What is meant by accidental symptoms?

A. Those which are present in some cases & absent in others.

7. What is meant by prognostic symptoms?

A. Those which may indicate the mode - manner or time of the termination of a disease.

8. Is it important that a physician should generally form a correct prognosis?

A. It is.

9. By what means does a physician generally arrive at the diagnostic symptoms in the commencement of a disease?

A. 1st By the patient's report. 2^d by attendants' report & 3^d by observation, the last is most important.

10. Are all periods of disease alike favorable for correct diagnosis?

A. No Sir, because at the commencement and termination of disease there is a greater similarity than at the period of involution.

11. Give an example of several similar at

commencement but different in Termination?

A. Fever & Mucous Pox.

2. Is the sense of sight much employed by the Physician in obtaining a knowledge of disease?

A. It is.

3. Name some purposes for which it is used?

A. By the exterior of the body is examined. Contenance eyes. Voice, how effected by respiration. mouth. tongue throat. the age, sex. form. Color. and the habits in some cases. the position - motion - or inability to move.

4. Name that class of disease which you diagnose by Sight only?

A. Cutaneous Diseases.

5. Has art aided this sense by any invention?

A. Yes. Speculum. it gives access to many parts which without it cannot be examined.

6. Name some of the uses of the ear in obtaining a knowledge of disease?

A. The history of the case. the patients report his sensations. come through the ear. by it the physician hears the language of complaint or the intuitive expressions of the patient. by it the accoucheur can determine whether ^{foetus} is alive or dead. by it the changes of the organs of the chest & abdomen are ascertained.

7. Has this aided by instruments?

A. By the Stethoscope.

8. Name some of the means used by the sense of touch.

A. In ascertaining the density. Size. position &c. of organs. State of some of the internal organs - the uterus &c. of the pulse. It is much used by the Surgeon & accoucheur.

Q. How is the sense of smell used?

A. To examine the breath and excretions of patients.

Q. Is Taste ever employed?

A. Should be in diabetes and other diseases.

But not unpleasant would be much used.

Q. What should be done before the treatment is begun?

A. Form a correct diagnosis.

Q. Should the Physician be thorough in his examinations?

A. Most certainly. For fear of becoming careless.

Q. Is it important that the examination be systematic?

A. It is.

Q. Why?

A. Because he saves time, obtains correct knowledge, gains confidence with the patient, &c. It may free the young from embarrassment.

Q. Should you listen to the long details of cases from the patient, cases uninteresting to him & unaccountable to you?

A. If there is time. or if the practitioner is young.

Q. What may you learn from him of importance by this plan?

A. His moral character. His habits - Temperament. Apprehensions &c.

Q. To what are you directed to give your attention first?

A. To what are called *concurrent or circumstantial* facts. Age, Sex, Temperament, diathesis, constitution, mode of living &c.

Q. What next?

Q. The position. position &c of the patient.

Q. Is it necessary that external surface of the body should be examined?

A. It is sometimes. When there are unnatural or unusual symptoms accompanying a known disease.

Q. Do not mistakes sometimes occur from in the diagnosis & treatment of disease by neglecting to examine the external surface?

A. They do. A fractured rib has been treated for Pleurisy.

Q. What is the first question to be asked your patient?

A. Where is your pain

Q. Will you always receive a correct idea of its locality from this description

A. You will not.

Q. How then? A. Require him to locate it with his hands.

Q. Then what should you do?

A. Ascertain the physical condition of the part by circumscripting it by pressure, Percussion &c.

Q. Should you be careful how you ask your questions?

A. Yes. Leading questions should be asked never

Q. After you have endeavored to ascertain the physical change of the part. to what should you then turn your attention

A. The functions of the part. If it be a secretory organ the secretions should be examined.

Q. If you have satisfied yourself of the presence of disease in a part and the kind of disease would you continue your examination over the whole system.

A. Yes. Sir. Other diseases may exist.

2. Where would you commence your examinations?

A. at the head.

3. What inquiries would you make there?

A. If pain exists the kind - degree - if the senses are natural. notice the Countenance.

4. What part next?

A. The Thoracic organs. Lungs. Bronchii. Trachea
Heart and arteries.

5. What part next?

A. Abdominal organs.

6. Would you use pressure of the parts?

A. I would.

7. If the abdomen be distended would ^{you} endeavor to know what distended it. whether air, water or something else?

A. Yes Sir.

8. What part next?

A. Viscera of the Pelvis?

9. Are diseases generally modified by arrangement of ^{the} viscine organs?

A. They are.

10. What are you to do now?

A. Learn the history of the case. the cause of the disease and previous treatment.

11. in. 12. Do you think it better to keep a record book?

A. I do. after the manner of the French.

13. Will you or was intended to keep a book of any other kind?

A. A common Place-Book.

14. Do you suppose diseases possess distinctness enough to be arranged in class.

A. Yes Sir.

Q. Give an instance of two diseases very different in their character affecting the same organ.

A. Pneumonia. & ~~the~~ Phthisis Pulmonalis.

Q. But are there not some Physicians who contend that these diseases are dependent upon inflammation of the same organ.

A. There are. Bronchitis is one of these.

Q. By what are you governed in determining the difference in disease?

A. The symptoms, treatment and the physical alterations.

Q. Name two diseases of the mucous membrane of the Intestines that differ in each of these modes.

A. Enteritis and Colica Serpentina.

Q. Does the generalization of diseases by ~~Transmission~~ to any practical use.

A. It does not.

Q. Since then there is sufficient difference in diseases to allow their being arranged in classes, is there sufficient similarity between some diseases for them to be arranged in groups & species?

A. There is.

Q. Will Intermittent Fever as it occurs at present agree with the history given of it by Hippocrates?

A. It will in all essential symptoms.

Q. Does the vaccine disease present the same characteristic marks now that it did when first produced on the human system.

A. It does.

Q. In what great particulars does Small Pox & Measles resemble each other?

A. Each is marked with a cutaneous efflorescence &

and the virus attack the same individual twice.

Q. Do you think ~~Inoculation~~ & Vaccines might be modified by inoculating some of the inferior animals with the virus as has been done in small Pox?

A. From the similarity of the disease it is reasonable to suppose so.

Q. By Whom was the first medical arrangement formed?

A. Saurages

Q. Whose is best?

A. Pinellus.

Q. What objection to Dr. Good's?

A. Change of the nomenclature of Diseases.

Q. What is Etiology?

A. The doctrine of ^{the} cause of diseases.

Q. What does Dr. Ford call those who deny the necessity of understanding Etiology?

A. Exclusionists.

Q. What reasons do they give to sustain their ideas?

A. 1st Though the cause be removed the disease will go through its course. 2^d Diseases may be removed while the cause still exists as in Intermittent Fever.

Q. Is it ^{it} important to understand the Cause of disease?

A. Yes. 1st To prevent disease. 2nd To be led to proper treatment.

Q. Are ^{there} such diseases as Spontaneous?

A. No Sir.

Q. How are causes divided?

A. Into Internal & External.

Q. What are Internal Causes?

A. All those varying changes in the system which

disturb the part or produce symptoms?

2. There was another division of the causes of disease mentioned what was it?

A. Sufficient and insufficient.

3. Was this division objected to?

A. It was. at least.

4. What was the next division mentioned?

A. Efficient or occasional & Predisposing.

5. What division is proposed?

A. Remote & Proximate.

6. Give the subdivision of the Remote.

A. Predisposing & exciting.

7. What is meant by predisposing causes?

A. Those causes acting upon or within the body rendering it particularly liable to take on disease.

8. Are these Causes ever hereditary?

A. They are. in nervous & sanguine temperaments.

9. What is necessary that a predisposing Cause should produce disease?

A. The action of an exciting Cause.

10. Do Predisposing sometimes become exciting Causes. & the reverse?

A. They do.

11. Give an instance?

A. Malaria sometimes predisposes to Intermittent fever & some mental ^{affections} ~~exaltation~~ that is the reverse.

12. Do you understand Efficient, Determining, occasional & Exciting Causes to mean the same?

A. Yes Sir.

13. What definition did Boerhaave give to Predisposing Causes?

A. That State or condition upon which disease

directly or immediately depends.

Q. What was it called by some Ancient Writers?

A. *Spes morbus.*

Q. Are there Causes various and numerous?

A. They are as much so as the physical alterations which take place in the body.

Q. Does every agent acting on the body produce its specific Effect?

A. Yes Sir.

Q. Is vomiting produced by Tartar Emetic what is the exciting Cause?

A. Tartar Emetic.

Q. Can you produce precisely the effect by applying Tartar Emetic to the surface of the Canthar.

Does it produce?

A. No Sir.

Q. Do the bites & stings of poisonous animals each produce on the system a different & peculiar effect?

A. Yes Sir.

Q. Do you suppose that every disease has its own specific Cause?

A. Yes Sir.

Q. May you then with propriety be said to be looking for something in endeavouring to ascertain the Cause of Intermittent Fever, or any other disease.

A. Yes Sir.

Q. But when Intermittent fever occurs in high febrile situations on what do you suppose it depends.

A. It is probable that malaria may exist there. at least there is no reason to say it does not.

Q. Do not some two agents acting as exciting Causes produce in the system the same disease?

A. They sometimes produce a disease called by the same name but there may be some difference in the disease or the cause on which it is supposed to depend may be acting imperfectly.

Q. What is generally supposed to produce Epidemics?

A. Some peculiar state of the atmosphere.

Q. If a sporadic case of disease of the same nature occurs would you refer it to same Cause?

A. I would.

Q. Does the division of Internal Causes embrace anything more than what is termed Proximate Causes?

A. It does.

Q. Are they generally Predisposing or exciting?

A. Predisposing.

Q. May they be either Local or general?

A. They may.

Q. Do you consider it important to understand the temperaments?

A. Yes Sir.

Q. Name the different temperaments mentioned by Dr Ford?

A. Sanguinous Bilious, Sympathetic and nervous.

Q. What do you understand by the Terms

A. Those individual differences caused by such disproportion of parts as regards volume and action, as to modify the whole organism without immediately affecting the Health.

Q. Give some of the Physical characteristics of the Sanguinous.

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A. Ruddy complexion - strong pulse - good shape - an
immaculate countenance. Firm flesh - light hair - fair
skin - blue eyes?

Q. To what diseases is this Temperament exposed?

A. Fevers. Inflammations. Hemorrhages.

Q. Give the marks of the Bilious?

A. Brown colored skin - dark hair. Pulse strong -
muscle firm. Subcutaneous veins prominent.

Q. To what diseases are these exposed?

A. Those of the abdominal viscera.

Q. Give the marks of the Lymphatic?

A. Skin pale. Flesh soft - fair hair - weak slow &
soft pulse - vital action languid - aversion to
mental and corporeal exertions.

Q. To what diseases most prone?

A. Those of the lymphatic system.

Q. Is the nervous generally acquired?

A. It is seldom original or hereditary.

Q. Are males or females mostly of this Temperament?

A. Females.

Q. By what is it characterized?

A. Small soft muscles. Slender form - vividness of
sensation. Facility of judgment &c

Q. To what disease prone?

A. Nervous diseases.

Q. Has he the power of changing the organization
or developing some organs at the expense of others?

A. It has.

Q. Is disease apt to be produced in an organ that is
much developed from exercise by the accustomed
stimulants?

A. No Sir.

Q. Is it very prone to be sympathetically diseased?

A. It is.

Q. Does the disproportionate development from habit of one organ dispose others to disease?

A. It does.

Q. With what disease is scientific men generally affected?

A. Dyspepsia.

Q. Will the accustomed immoderate exercise of the digestive organs predispose them to sympathetic ailments?

A. It's Sin. but will others.

Q. Are diseases of the brain frequently dependent on it?

A. Yes Sir.

Q. Why?

A. The digestive organs are developed at the expense of the brain particularly, as well as other organs of the system.

Q. The effects of the immoderate use of what other organs were mentioned?

A. The genital organs.

Q. What organ is particularly liable to be diseased when these organs are exercised to too great a degree?

A. The stomach.

Q. Will the nervous system be very apt to be affected?

A. It will.

Q. There are some other organs that are ^{apt} to be sympathetically affected which are they?

A. The Thoracic viscera.



Q. Does the unnatural & immoderate use sometimes render the natural & moderate use ^{of them} impossible?

A. Yes Sir. As was the case with the old rascal that married the beautiful girl of sixteen.

Q. Can ^{you} allude to another instance?

A. A Lord of England who having died from epilepsy while in "the Act", his death was the next day announced in the report of some ladies who said our Lord died last night in a "paroxysm".

Q. What view is thought to be followed by its consequent misery in a corresponding degree?

A. Onanism.

Q. Is the physical system affected in its structure from this loathsome habit?

A. Yes Sir.

Q. In what other way will a person suffer for the pernicious effects of this vice?

A. The functions of animal life receive its deleterious consequences.

Q. When this is a cause of disease is it generally recognized?

A. It is not. The patient conceals it.

Q. In what way does the habit produce disease generally?

A. The semineferous vessels loose their tone & there is frequently an escape of the seminal fluid.

Q. At what time does this fluid escape most generally. That is involuntarily.

A. While passing the urine or asleep.

Q. Is the healthy action of the semineferous tubes ever impaired from other causes than the excessive use of the genital organs?

A. They are. *Trichostrongylus axei*. *ascaris*. *strictus* in the rectum or urethra. Inflammation of the urethra.

Q. May it not be produced by excessive natural use of the genital organs.

A. No Sir.

Q. Is it often produced by all the last named causes as by Masturbation?

A. It is not.

Q. By whom has the affection consequent on this habit been particularly studied & described?

A. Dr. Cullen. of the College at Montpellier

Q. What symptoms would authorize you to believe that the system was suffering from a wasting of the Semens?

A. Pale haggard, dejected Countenance, emaciation—muscular debility. a ~~disposition~~ disposition to avoid society. Pain in various parts of the system, trembling & digressing from exertion, inflamed eyes, Constipated bowels inability to procure refreshing sleep. Symptoms of gastritis &c.

Q. By what could a diagnosis be made out?

A. Confessions of the patient. And examination of the urine.

Q. What would the urine exhibit in a case of this kind?

A. A white Cloudy flocculent coat on it after standing & probably mixed with blood.

Q. Would the urine have any peculiar odour?

A. That of Semen.

Q. What is apt to occur soon after passing the urine?

A. A spasmodic contraction of the accelerator urinae muscle by which some semen will be squeezed out of the tubes.

2. Is there any remedy for this distressing disease?

A. There is.

2. What would be your remedy for a swelling of the Seminal Fluid?

A. Cauterization of the prostatic portion of the Urethra.

2. With what would you Cauterize?

A. Luna Caustic.

2. Are there not other methods for curing this disease?

A. Remove the Cause if it continues to act - such as acridities &c.

2. Does there seem to exist a sympathy between the Rectum and the urinary organs?

A. Yes Sir.

2. How is the sympathetic action manifested in dysentery?

A. Strangury is a frequent occurrence.

2. What is a good mean to get rid of acridities?

A. Injection with Cold water.

2. What conditions of the blood were mentioned as Causes of disease?

A. Excessive and deficient quantities.

2. Upon what do the Passions depend?

A. The action of the brain & the physical structure of the Centre of the nervous system.

2. Does joy ever produce deleterious effects?

A. When sudden & excessive death has been the result.

2. What is said to have been the cause of the death of John Hunter?

A. Anger. It produced apoplexy.

2. What are some of the affections caused by these Passions?

A. Vicious habits, prostrations, Colic &c.

2. What are some of the depressing passions which will produce disease?

A. Fear and Grief.

2. Was sleep any agency in producing disease?

A. Yes Sir. When too much or too little is taken.

2. What has age to do with disease?

A. It greatly modifies and predisposes to disease.

2. What two ~~temperaments~~ ^{systems} predominate in infants?

A. Nervous & vascular

2. Is the infant more susceptible of disease in these two systems than adults?

A. They are

2. Does the infant exercise muscular motion much from impressions made on the system?

A. Yes Sir.

2. What is done with these impressions in the adult, which are responded to by muscular motion in infants?

A. They are changed to Ideas.

2. Can you prove the arterial action to be greater in the infant than the adult?

A. Yes Sir. The number of pulsations are greater.

2. Do the capillary vessels also predominate in action in infants?

A. Yes Sir.

C. Prove it?

A. Hemorrhages are more frequent. the superior action is also evident from the growth of the Teats.

2. Are opiates proper generally in disease of children?

A. They are, used judiciously.

2. What cooling remedy was recommended for diseases of Children

A. Warm bath is generally applicable.

2. Is it generally necessary to bleed in diseases of young Children

A. It is not.

3. By what general cause are adults predisposed to disease more than infants or the aged?

A. Exposure.

4. In infants what part is most subject to disease?

A. The head.

5. What in old age

A. The urinary organs.

6. Name the principal sources of disease from external causes.

A. Food, drink, & Atmospheric changes

7. Is the custom of taking too much food increased or diminished by civilization & refinement?

A. Increased, undoubtedly.

8. May not food prove injurious without being taken in improper quantity or quality?

A. When the digestive organs are not in a proper state.

9. Will the use of Animal Food alone produce disease?

A. No. Scouring.

10. What diseases will the use of vegetables alone cause?

A. Diabetes

11. When does water generally produce disease?

A. When impregnated with some deleterious agents as Lime, Copper, Lead &c

12. An alcoholic drink a fruitful source of disease?

A. They are.

13. On whom is Temperance of eminent importance?

A. The Student.

14. What was quoted from the Apostle with respect

to this?

A. He who striveth for the mastery must be temperate in all things.

Q. What effect does the full use of animal force have on the Passions?

A. Fortifies and increases them.

Q. In an adult what is the effect of vitiated air on the moral faculties?

A. Gives amenability of Temper.

Q. Will abstinence increase the human Passions?

A. As far diminished them.

Q. Are variations in the physical and demonstrable properties of the atmosphere frequently a cause of disease?

A. Yes Sir.

Q. In what three particulars

A. Principally in Density, Temperature & Moisture, or Barometrical, Thermometrical, Hydrometrical.

Q. How does cold moist air produce disease?

A. Directly by hindering the action of the cutaneous surface.

Q. What effect has warm moist atmosphere directly on the system?

A. Diminished energy and debility.

Q. What would you call its indirect action in producing disease?

A. The generation & concentration of Malaria.

Q. In what Claps are diseases most frequently produced by mechanical irritants existing in the atmosphere?

A. Loom Cutters, Cotton Spinners & Needle grinders

Q. What gases sometimes exist in the air of spots detrimental?

A. Carbonic acid, & Sulphuretted Hydrogen.

Q. Are there not other agents though not demonstrable?

~~are~~ supposed to exist in the air & prove injurious to human life?

A. Yes Sir.

Q. Do you think there is sufficient evidence to prove the existence of this agent?

A. Yes Sir.

Q. How may Small Pox be produced?

A. By palpation or by using the air as a vehicle.

Q. What evidence have you of the existence of malarial?

A. Take an individual who is enjoying good health, by the use of food drink & pure air. I expose him to the exhalations from a marshy place continuing the use of the food & drink. & yet disease will probably result.

Q. I remember.

What division of Diseases did Dr Ford reckon?

A. 1. of the Head. 2. of the Thorax. 3. Abdomen & Pelvis & Skin.

Q. What was the fever first spoken of?

A. Ephemeral.

Q. What are the most common causes?

A. Irregularity of diet - great exercise, exposure to cold.

Q. With what other fever is a forewarning of this considered identical?

A. Intermittent fever.

Q. Who are most frequently affected with this disease?

A. Children.

Q. Is it necessary to commence an active course of treatment for the cure of this form of fever?

A. It is not.

Q. What is fever?

A. Increased heat - Pulse increased in frequency or force, disordered functions of animal and or

ganic life.

2. What disease is thought to have possessed its original form & type, under all circumstances, ~~the~~ the earliest description of it, as much or more than any other?

A. Intermittent fever.

3. What is meant by intermittent fever?

A. A succession of paroxysms of fever, each paroxysm commencing with a chill & terminates with perspiration, there being a perfect intermission between the paroxysms.

4. What is a paroxysm?

A. An assemblage of marked phenomena in disease?

5. In a paroxysm of intermittent fever what series of phenomena is there?

A. 1. Cold. 2. Heat. 3. Sweating stages.

6. What do you understand by the term. Intermissions?

A. From the termination of one paroxysm to the commencement of another.

7. What is an interval?

A. It embraces both a paroxysm & an intermission.

8. What are some of the most prominent symptoms of the cold stage of intermittent fever?

A. Weakness. Lassitude. Pains in the head, knees & back. Cold along the back first, then extending all over the body. Rigors. Depression of the mental faculties. Surface pale & shrunken. Pulse small & frequent. Tremors. Rigors. Breathing oppressed. Nausea & vomiting - Head ache, Thirst. Stools pale & scanty. Expectoration clammy, and slight. Organs of sense impaired in action. Alterations of heat &c.

9. How long does the stage continue?

A. From one to 3 or 4 hours, sometimes longer.

10. Is this usually bile discharged by vomiting?

A. There is.

Q. Does that prove there is more vented than in health?

A. It does not.

Q. What stage supervenes as the cold stage disappears?

A. The Hot Stage.

Q. Give the symptoms of this stage?

A. The alterations of heat and cold give place to heat, ~~and~~ vomiting increases. Face strong frequent pulse - surface hot and dry. urine scanty & high colored - without sediment. great thirst. Pains in the head back & extremities &c.

Q. How long does the stage continue?

A. It is various, generally from 4. to 8 hours, longer than the cold stage.

Q. What stage next; the sweating?

A. Yes Sir.

Q. On what part does the sweat first appear?

A. About the Head & breast.

Q. What is the state of the pulse after this stage is developed?

A. Probably loses its hardness but retains its frequency.

Q. Is then a subsidence of all the urgent symptoms in this stage?

A. There is.

Q. How does this stage terminate?

A. In a state of *laxity* or *relaxation* +

Q. What is meant by the type in intermittent fever

A. The form which it assumes with respect to the duration of the interval.

Q. What is the quotidian Type?

A. When the paroxysm recurs daily.

Q. What is the length of the interval in the Tertian?

Q. 4 & 8 hours.

Q. What of the quartian

A. 7 & 8 hours.

Q. What is the double tertian type

A. A paroxysm occurring every day but more violent on every other day.

Q. Are the paroxysms always regular in their accession?

A. They are not.

Q. What are they then called when not regular?

A. Postponing or anticipating

Q. What is the tendency of an anticipating paroxysm?

A. To become remittent.

Q. What that of a postponing?

A. If it be tertian, to become tertian, if tertian to become quartan &c.

Q. Which of these types is the most uniform in the recurrences of its paroxysms?

A. Quartan

Q. Which is considered the most difficult to cure?

A. The quartan.

Q. Are the changes which take place in the physical structure to be studied before or after death?

A. Sometimes before but oftener after.

Q. To what are you directed as the only correct course to attain a knowledge of the pathology of Intermittent Fe.

A. To the careful observation & interpretation of symptoms during life.

Q. What do you observe in the connected symptoms of the tertian fever?

A. The functions are generally disordered, no organ in the system performs its function in a healthy manner.

Q. What would you infer from that fact?

Q. That these systems universally distributed over the body must be the cause of ^{the} universal disturbance.

Q. What are those systems?

A. Nervous & vascular.

Q. What is the centre of the vascular?

A. The Heart.

Q. How the whole circulatory system is modified by a disordered action of the Heart. Is it?

A. Yes Sir.

Q. Will the disordered state of the circulation always correspond with the disordered action of the Heart?

A. Unless there be considerable structural change in the Heart.

Q. What may modify or disorder the action of the Heart?

A. Inflammation. 2. The state of the fluids as too little, too much or vitiated blood. 3 influence of distant organs through the medium of the nerves.

Q. Does disordered Circulation in Pulmonary Liver depend on inflammation of the heart?

A. No Sir.

Q. Why not?

A. That change is not observed in post mortem examinations that would be if there was inflammation.

Q. Does it depend upon the state of the fluids?

A. It does not. if it did other changes would be effected in the system.

Q. It must then depend on other diseased organs?

A. Yes Sir.

Q. What evidence have you that disease in other organs will disorder the circulation through the action of the Heart?

A. In any of the Phlegmasia. as in inflammation of the Psoas. Pung. &c the circulation will be disordered.

Q. Why may not these Local inflammations produce Intermittent Fever?

A. For the reasons before stated. & from the fact that local inflammations never produce Periodical fevers a striking feature of Intermittent Fever. + not

Q. What proof have you that local inflammation will produce disease intermitting in its character?

A. If during a case of Intermittent Fever a Local inflammation occurs in some important organ. the intermittency or periodicity of the Fever will be destroyed.

Q. Which are the organs affected & upon which does the disordered Circulation depend?

A. From the manner in which the symptoms occur. the nervous system is suggested as being primarily affected.

Q. What are the first disordered functions?

A. 1. Sensation 2. Voluntary muscular motion 3. Intellectual faculties.

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Q. Will disease in the nervous centres produce all the symptoms that occur in intermittent fever?

A. Yes Sir.

Q. If the portion of the spinal marrow enclosed by the cervical vertebra be inflamed what are the symptoms?

A. There will be in the superior extremities contractions. Rigors convulsions or Paralysis. also impeded respiration. it is asphyctic.

Q. At what point of the superior extremities do these states generally commence?

A. On the Finger

Q. What is cause of the death of persons who die from in-

Inflammation of the cervical portion of the spinal marrow?
 A. Asphyxia.

Q. If the dorsal portion be inflamed what symptoms ~~are~~
 have we then?

A. Difficult respiration. Disordered stomach & bowels
 great nausea & vomiting. Heart's action disordered

Q. What are symptoms if the lumbar portion is in-
 flamed?

A. The abdominal organs disordered & the inferior
 members paralyzed or convulsed.

Q. If the substance of the brain be inflamed. where do you
 find the symptoms most manifest?

A. In the extremities & distant parts.

Q. Are you now satisfied that all the the symptoms of
 Intermittent fever may be produced by inflammation
 of the nervous centres?

A. It is possible.

Q. Will not irritation without inflammation of the
 nervous centres be manifested in distant organs?

A. No Sir.

Q. Suppose you prick with a pin the origin of a nerve
 of the spinal marrow where will the pain be principally
 felt?

A. In the tissue on which that nerve is distributed?

Q. Suppose you divide the nerve. then irritate any portion
 of that part separated from the spinal marrow where will
 the pain then be felt?

A. Where will be now.

Q. Then we have Physiology to aid & support us in this
 doctrine have we?

A. Both Physiology and Pathology go to prove it

Q. Suppose you prick your finger upon what does the

Pain depend?

A. Upon the condition of the spinal marrow whence the nerve takes its origin.

Q. Do you suppose the same feeling might be produced by an idiopathic affection of that portion of the spinal marrow giving origin to the nerve?

A. Yes Sir.

Q. Suppose in Pleurisy all nervous communication between the Pleura & Spinal marrow be cut off. would there be any pain?

A. No Sir.

(Dec 10th)

Q. What treatment was found to relieve Mrs — who had head ache pleuralgia & an irritable stomach accompanied by Remittent Fever?

A. The bowels were kept open with small doses of Calomel. a mustard plaster was applied to the lower vertebrae, & Cupes produced permanent relief.

Q. Now you are satisfied from the cases read by Dr Ford that many painful affections & disordered functions of distant organs may be relieved by topical applications to the spine?

A. Yes Sir.

Q. Upon what do you suppose those Intermittent Pains occurring at the last part of gestation & called false Pains depend?

A. Slight irritation of the Lumbar portion of the spinal marrow.

Q. How would you relieve them?

A. By a mustard plaster to the lumbar vertebrae.

Q. Do you suppose you could cure irritable uterus by topical applications?

A. They are highly recommended by the Prop. of Obstetrics.

Q. We have seen that pain & disordered functions may be produced in distant organs by an affection of the spinal marrow, but do you think inflammation may be produced?

A. Yes Sir.

Q. What two elements are necessary to action on the living body in Health?

A. A living impenetrable surface & some agent to make the impression.

Q. Are these two elements necessary to the production of disordered action, as in inflammation?

A. Yes Sir.

Q. In what system does inflammation commence?

A. In the Capillary.

Q. In inflammation upon what is the excitable or impenetrable surface dependent?

A. The nervous system.

Q. By what is the impression made on this surface?

A. By the blood.

Q. By what is the action of the heart & circulation controlled & modified?

A. The nerves proceeding from the spinal marrow.

Q. Suppose the portion of the spine giving origin to the nerves of the Pleura be modified by some deleterious agent may it not produce pain & increased action of the Capillaries of the Pleura?

A. Yes Sir.

Q. If the pain & increased action of the Capillaries continue for 24 or 48 hours. what will thus be produced?

A. Inflammation.

Q. Reasoning from Physiology you would suppose that inflammation in a distant organ may be produced by irritation in the Spinal marrow?

A. I would.

Q. What other proof is there of the same?

A. Those drawn from Pathology.

Q. In a acute Rheumatism is there any inflammation?

A. In the joints there will be none. Heat. Pain & swelling.

Q. What is considered the Pathology of this disease by the most distinguished pathologists of the present day?

A. Spinal Irritation.

Q. Will the most successful Treatment of this disease go to confirm the correctness of the pathology?

A. Yes Sir. Counter irritation.

Q. In that form of gastritis occurring most frequently in young females of irregular Hours. & Luxurious living what is the best remedy?

A. Applications to the spine.

Q. Do you think gastritis occurring during fevers may be relieved by applications to the spine?

A. Often.

Q. Do you think Spinal irritation ever produces spasms & convulsive actions in the organs of organic life?

A. Yes Sir.

Q. Upon what do you suppose nervous palpitations of the Heart depend?

A. Upon irritation of the lower cervical or upper dorsal vertebral contents.

Q. With ^{what} disease is Dr. Ford's servant affected who is certainly relieved by applications to the Spine?

1. Asthina.

2. Do you think Hysteria was dependent upon Spinal Irritation.

A. Certainly.

3. Give us the case of colic treated by Dr. Ford.

A. A negro man was frequently attacked with Cramp Colic. A stone was passed through the skew of the lower cervical vertebra. he was relieved & has had no attack for 2 years.

4. Are the bowels generally easy operated on by Cathartics in these cases?

A. It is difficult to produce an evacuation. Counter irritation assists in producing evacuations.

5. What remedies did Dr. Hughes use in Colica Pictorum? as published in The S. M. & S. Journal.

A. Applications to the spine.

6. What was the disease called by Sauvage?

A. Reckalgia

7. What important precept was given you about diseases generally?

A. When called to a case examine into the state of the Spinal marrow.

8. Do you suppose some portions of the spinal marrow will be found tender in a majority of cases of Intermittent Fever?

A. Yes Sir.

9. How would you make the examination?

A. By pressing firmly on the spinous processes. or later each one between the finger & thumb & communicate a rotatory motion to it. or by squeezing a sponge wet with warm water lifting it over one the spinous processes.

Q. In intermittent fever what is the primary local affection?

A. Irritation of spinal marrow or Brain. or both.

Q. Why do you say so?

A. 1st From the uniformity of the existence of disease there. as was effected by pain in some portions of it when pressed.

Q. Give another reason corroborating the same fact?

A. The uniformity of successful treatment. When applications appropriate are made to the spinal columns.

Q. Will you give another important reason?

A. From an examination of the symptoms.

Q. Can you give any facts that will tend to establish the first reason?

A. Of 40 cases of Fever principally Intermittent treated by Dr. Ford all but 4 manifested tenderness of some part of the spine.

Q. Did he give you any inducement to believe that disease did exist in some portions of the spinal marrow in the 40 cases.

A. One of these cases was cured by a blister to the spine without any other remedy. & the others were much benefited by such treatment.

Q. Will the treatment of the 40 cases go to establish the 2^d reason?

A. In every case the application of revulsives to the spinal Column was indicated.

Q. Do these applications relieve the distressing symptoms sometimes present in Intermittent fever?

A. They do. Malaria. Colic pains. Laborious breathing &c.

Q. What remarkable fact occurred in the case of malignant Intermittent fever read you?

A. The fingers of the patient that were icy cold became warm soon after cups were applied to the spine.

Q. Will the symptoms of Intermittent fever justify the 3^d?

A. Yes Sir.

3. What are the precursory symptoms? x

A. Pain in the back & hind knees - & all the joints - uneasy
and restless. great fatigue from slight exertion - loss of
appetite perhaps nausea & vomiting for 2 or 3 days -

2. Is the pain in the back a uniform symptom?

A. It is

2. If there be pain existing in any organ. as the Liver
Stomach &c will it be said to be diseased?

A. Yes Sir

2. Why not ~~shall~~ say then is disease in the spinal
marrow when there is pain?

A. I know no reason.

2. What of the pains in the joints?

A. They may with propriety be referred to the spinal
marrow since the pathology of chronic & even acute
rheumatism is acknowledged to be spinal
irritation

2. What of the disordered state of the muscles of
motion

A. Why it is evident that the healthy action &
motion of this system is dependent on the health
of the Spinal marrow. & so much the more of
the former dependent on disease of the latter.

2. Of the nausea & vomiting?

A. It may depend on spinal irritation. The experience of
any one that ever applied a mustard plaster to the
thoracic vertebrae in indigestion & stomach would prove the fact.

2. Can you with as much certainty refer the symptoms
of the Cold Stage to disease in the Spinal marrow as
you have done in the precursory symptoms

A. Yes Sir.

Q. Will you agree with McCallin that there is a spasm of the extreme vessels?

A. I suppose so.

Q. And that the cold stage is the cause of the second or hot stage?

A. Yes Sir. From throwing an unusual quantity of blood on the internal organs and exciting them to increased action particularly the heart.

Q. What did Hoffman say about the proximate cause of Fever?

A. I affirm that the formal and fundamental cause of fever is spasm of the nervous system particularly of the spinal marrow.

Q. Do you suppose Gastritis ever produces Fever?

A. Yes Sir.

Q. Is it then a more violent supposition that Irritation of the spinal marrow will produce fever?

A. Not at all.

Q. How can the cause of I. F. ~~be~~ malaria; produce disease in the spinal marrow when it must be applied to the mucous surfaces of the system?

A. By making the impression on the extremity of the nerves of the part. the sensibility of which nerves is dependent upon that portion of the spinal marrow which gives them origin.

Q. Can you refer to similar actions produced by other agents on the system?

A. Yes Sir. Strychnine though placed in the stomach or injected in the blood vessels will act principally on the spinal marrow. as likewise Ergot. Cantharides alcohol. Sassafras & others Each has ^{its} own distinct organs or systems to act upon.

Q. Can you suppose with the same propriety that the other agents which you admit sometimes produce I. F. direct their deleterious action to the Spinal marrow?

A. Certainly.

Q. What word is that to which resort is often had, as a cause of disease & ^{as} disease itself, but which is really an agent, nothing material?

A. Cold.

Q. What is the title of the work of Mays. published in the French language?

A. Traite sur Cerebro-Spinal Intermitteut Irritation Commonly called Intermitteut fever.

Q. What was the number of cases treated by that man in 12 months?

A. 3765.

Q. What was the result of the post mortem examinations that were made in 29 of these Cases.

A. There was found marks of recent Cerebro Spinal disease in 27.

Q. How much diversity of opinion exists among Physicians in the treatment of I. F.?

A. No less.

Q. How is the treatment divided?

A. That which is proper during the Intermissions & that during the Paroxysms.

Q. What is the object of the treatment during the Intermission?

A. To prevent a return of the paroxysm.

Q. What during the Paroxysm?

A. To moderate its violence.

Q. Would you give an emetic during the

exist

Thibodaux &

& Co

intermission?

A. It would do very well 2 or 3 hours before the paroxysm.

C. Will it sometimes prevent the paroxysm?

A. It will.

Q. What would you give to produce Emission?

A. Tartar Emetic. or Speecac or both.

Q. What doses of these articles would you give?

A. Tartar Emet. 1 grain 25 minutes - Speecac 30 grs repeated in the same time. Or at once 2 grs Tartar Emetic & 15 grs Speecac -

Q. What was the next Class of medicines recommended to prevent the paroxysm returning?

A. Narcotics.

Q. What is necessary for them to prevent the return of the paroxysm?

A. The system must be under their influence at the time you expect the chill. & for 2 or 3 hours previously.

Q. What was the composition of the pill advised?

A. 1 gr. Opium. 2 grs African Pepper.

Q. What Stimulants are sometimes used in this form to prevent the paroxysm from coming on?

A. Brandy. Wine. Pepper. Sea. Camphor. Black Pepper. The aromatic stimulants. Blisters &c.

Q. At what time would you apply the blister?

A. A sufficient time for the system to feel its stimulating effects at the commencement of the cold stage.

Q. What is the most powerful remedy known for prevent the paroxysm?

A. Cinchona. & its preparations.

Q. How would you give the Quinine?

A. 2 grs every hour. during the intermissions or
Commence sufficiently long before the Paroxysm
as that 12 or 16 grs may be taken.

Q. Why is the dose of this article larger now than when
introduced into use?

A. It is now generally adulterated.

Q. What is another name recommended for giving this
Article?

A. Give 10 or 12 grs 3 hours before the paroxysm.

Q. How is treatment during the Paroxysm divided?

A. Into 3 parts

Q. What is the object in treating the cold stage?

A. To arrive at it as soon as possible.

Q. Is this stage attended with any danger?

A. It is sometimes a stage of great danger.

Q. What is the treatment of this stage?

A. Apply hot external applications. Warm bed cloths,
hot drinks of herb teas, as mint, sage, & balm &c

Q. What is better than these teas as warm drinks?

A. Simple hot warm. taken in large quantities. as
warm as it can be borne.

Q. Why is it better?

A. It will as certainly as the tea relieve the sensa-
tion of cold. produce vomiting, & the stomach be
emptied when the Hot stage comes on.

Q. Are opiates proper during the cold stage?

A. Yes in. when protracted.

Q. Which is the best Preparation when given in this
stage?

A. Morphine.

Q. Why better?

A. More speedily absorbed.

2. What do you think of vesication in this stage?

A. It is a safe but unnecessary remedy except in protracted cases.

2. What are the indications in treating the hot stage?

A. Diminish the violence. reaction. abate pain and sickness.

2. Is bloodletting proper in this stage?

A. It is not generally necessary.

2. Name some of the means used to fulfill the above indications?

A. Let the patient have cool air cold water to drink & by injection. Cold water applied to the surface generally & locally. Warm Pediluvium.

2. How should this be administered?

A. While the patient is in bed. Continued for a half to an hour. as hot as can be borne. with mustard added if necessary.

2. What is another important means for relieving the pain nausea & vomiting.

A. Stimulating injections

2. Of what should they consist?

A. One table spoonful of salt. to 1 pt. warm water. or if more stimulating is desired use Soap. or Turpentine

2. An Opial is proper in this stage?

A. Yes Sir.

2. Name some of the diaphoretic means used in this stage.

A. The most efficient is cold water. Stimulating drinks Castan Emulsi 1 gr. Nitras Potassae 17 divide into 8 parts take one every hour.

2. What is the most important of all means?

A. Leeches. Cupes. & sinapisms to the Spinal marrow.

Q Which is the most proper during the hot stage?

A. Puffs.

Q. What are Cathartics to be administered?

A. At the approach of the strating stage.

Q. Is it generally necessary to give them?

A. If several Paroxysms have occurred.

Q. Why is it then more necessary?

A. To relieve the congestion of the internal organs - particularly the liver.

Q. What is generally brought away by mercurial cathartics when you would suppose the liver congested?

A. A dark fluid. Perhaps vitiated bile.

Q. Would you always defer the administration of Quinine until the system was prepared?

A. No Sir. Give quinine to prevent the Paroxysm and ^{then} correct the disorders that may exist.

Q. Since this treatment has been successful. a pathology that will harmonize would be correct?

A. Yes Sir.

Q. Will considering its pathology gastritis do so?

A. It will not.

Q. Why?

A. Emetics. Stimulants. or narcotics are not proper in that disease.

Q. How would ^{you} account for the good effects of Cathartics in S. F.

A. Principally by their revulsion effect, determining the blood to the mucous membrane of the intestines.

Q. Is Quinine properly a Tonic?

A. No Sir. It is a nerve, ~~antipe~~ antiperiodic or narcotic.

2. Why do you say so?

A. By observing its effects in very large doses which is evidently most manifest in the disorder of the senses.

Q. How does it act in curing I. F.

A. It produces its own peculiar action on the nervous system.

2. What is observed in relapses of I. F.?

A. They take place at Septenary periods.

Q. At what time are quotidian most apt to occur after having disappeared?

A. On the 14th day. Tertian on 21st.

Q. Of what practical importance is this?

A. That the return of a paroxysm may be met or anticipated with proper remedies.

Q. What did Dr. Rush find most effectual in preventing the relapse of Intermittent Fevers.

A. Rubbing to the back.

Q. 14th I see 14th day.

Q. Are malignant or complicated Intermittent diseases of a very fatal character.

A. They are without treatment or with ineffectual treatment.

Q. Do you consider them quite as much under the control of proper treatment, as simple I. F.?

A. Yes Sir.

Q. Where do they most frequently occur.

A. Insalubrious districts, as about the Pontine marshes, along the Northern Coasts of Africa.

Q. Do not sporadic cases occur elsewhere?

A. When simple I. F. prevails some sporadic cases of malignant I. F. ^{are} apt to occur.

Q. On what are these Sporadic Cases dependent?

A. The state of the system exposed to the influence of Miasmata.

Q. What definition would you give to the Intermittents?

A. Intermitting fever with congestion of some vital organ or organs manifested by violent symptoms during the paroxysm followed by a perfect intermission.

Q. Are not Physicians not experienced with this form of fever very apt to form an erroneous prognosis?

A. They are.

Q. By the continuance of the disease do the paroxysms become milder or more violent?

A. A long Every succeeding paroxysm becomes more violent.

Q. How long before this disease runs its course?

A. It does not continue generally longer than three or four paroxysms. Sometimes - terminates fatally in the first.

Q. How many varieties of malignant intermittent fever did Alibert make in his work on these diseases?

A. 20.

Q. What division of malignant I. F. is made by Mr. Ford?

A. 1 Increased irritation or inflammation of the Cerebrum or spinal marrow or both. 2 Thoracic congestion or inflammation. 3 Abdominal ^{or congested} inflammation.

Q. What are the symptoms of the first?

A. In this form there will probably be every form of Apoplexy, & if not fatal during the paroxysm there will be a perfect intermission.

Q. What is another symptom generally present in this form or constituting a subdivision?

Q. Tarsing delirium.

Q. What is the term applied to the 3 subdivisions of malignant Intermittent Fever?

A. Algid malignant intermittent Fever.

Q. What are the symptoms in this?

A. During the cold stage there is great oppression & suffering in the precordial region - prostration, restlessness - the hot stage is imperfectly developed the oppression continues. the skin does not become warm until after the sweating stage.

Q. How would you distinguish this from a protracted chill?

A. In this after the lapse of the usual time. there is an abortive attempt at reaction - in the chill the temperature taken by placing a thermometer under the tongue is found to be about natural, but in this fever it will fall several degrees.

Q. What are the ^{characteristic} features of temperature in M. S. F.

A. Heat.

Q. Are the intellectual ~~organs~~ functions much disordered?

A. Very slightly if perceptible

Q. What two functions of nutrition do you consider most disordered in these cases?

A. Circulation & Calorification

Q. Are these functions performed under the special influence of the cerebro-spinal ~~nerves~~ nerves?

A. They are.

Q. Is this disease of frequent occurrence?

A. It is.

Q. What are symptoms of Thoracic malignant intermittent fever?

A. They depend upon the organ affected & whether it is in a state of Congestion or inflammation, though if the lungs then will by symptoms of Pneumonia, if the heart - Pericarditis, if the Pleura pleuritis.

Q. May the same be said of abdominal malignant Fever?

A. Yes Sir. then will symptoms of inflammation of some organ added to intermittent fever

Q. Which should form the primary consideration in treating these cases, the I. F. or the complicating circumstances?

A. The intermittent fever, but local disease should by no means be disregarded.

Q. How would you regard these local affections in your treatment?

A. As simple Phlegmasia.

Q. Would you at the same time you were depleting for pneumonia give Quinine to prevent the return of the paroxysm of intermittent fever?

A. Yes Sir

Q. But would you in a patient suffering with these symptoms, such as delirium &c. or gastritis, vomiting and lancinating tongue, &c. think of giving Quinine to arrest the paroxysm of intermittent fever?

A. Certainly.

Q. What is Quinine considered in these cases?

A. The life of the patients life, the only remedy.

Q. How is the dose to be proportioned?

A. According to the violence of the preceding paroxysm.

Q. What quantity would be a dose in these cases?

A. From 5 to 50 grs given every one or two hours.

Q. In treating Complicated I. F. will you find it necessary ^{at the} sometimes to practice venesection & give Quinine?

A. Yes Sir.

Q. Are very nearly all the Fevers of this Climate, intermittent excepted, of a Remittent Character?

A. They are.

Q. What is Remittent Fever?

A. Fever in which the symptoms abate at regular periods and then increase without having quite clear off?

Q. What is that part of the Fever characterized, by an abatement of the symptoms called?

A. Remission.

Q. What when they are increasing in violence?

A. Exacerbation.

Q. What is this Fever generally called?

A. Billious Fever.

Q. Do remittent fevers differ very much in the order & violence of the symptoms

A. Yes Sir.

Q. In simple Remittent Fever do the prominent symptoms differ from those of Intermittent?

A. No Sir.

Q. How the first Paroxysm differ from that of intermittent Fever?

A. It does not.

Q. How long will the paroxysm continue before a remission occurs?

A. Within 24 hours a remission generally occurs the time however varies.

Q. In the succeeding Paroxysm will there be so decided

a chill as in the first or as in S. F.?

A. No Sir, there will be a chilliness but not a marked chill.

Q. At what ^{time} of the day will the symptoms generally be most violent?

A. About noon.

Q. At what the Remission?

A. In the morning.

How long is ~~simple~~ Remittent Fever generally running its course?

A. From 5 to 10 days.

Q. Will the symptoms be much modified by particular local effects which perhaps universally exist in this disease?

A. No Sir, the symptoms of the local affection will be manifest.

Q. What may generally be termed in a remittent fever that will terminate fatally?

A. Loss of the remission.

Q. Are the causes of remittent the same as the causes of intermittent fever?

A. No Sir.

Q. Why do you think so?

A. Of Persons exposed to miasmata some have intermittent, others remittent fever.

Q. On what then does the remittency depend?

A. Some local affection.

17. Q. What is the pathology of remittent fever?

A. General Epical irritation in a greater degree than in intermittent fever.

Q. What are the three ^{orders} ~~methods~~ of investigating the pathology of disease?

Q. By closely observing & thoroughly examining your Cases. D. By observing the succession order, duration violence &c of the symptoms. B. By interpreting the symptoms.

Q. Is there not generally some local affection in Remittent Fever?

A. Yes Sir

Q. When is it most commonly manifested?

A. In the Stomach.

Q. Why not consider this the primary seat of the disease?

A. There is not in this Fever inflammation of the stomach. the medicines found to be beneficial in remittent Fever would be injurious in gastritis.

~~Q. & C.~~ Q. If there be disorder in the function of the Stomach & that be not caused by inflammation what would you call it.

A. Gastric embarrassment depending upon a disordered state of some portion of the spinal marrow.

Q. You are by this time satisfied that disease in the nervous centres may be manifested in the disordered functions of distant organs? are you (not?)

A. Yes Sir.

Q. What are the symptoms of Remittent Fever indicating the disordered action of the Stomach?

A. Anorexia. nausea & vomiting.

Q. It has been said there was no inflammation of the stomach generally in this disease, but are not these symptoms present in inflammation of the Stomach?

A. Yes Sir. but they do often exist when there is no gastritis.

Q. Give an instance of these symptoms when there is no Gastritis?

A. A minute dose of Ipecac will produce these disgusting vomits or rights & will do the same. They are frequent in many diseases where the Stomach is perfectly sound, as in Hydrocephalus.

Q. What is said in relation to this by those who consider gastritis as the primary disease of R.F?

A. They say fever is the test of there be inflammation.

Q. But are there not some cases of remittent fever which run their course without any nausea & vomiting?

A. There are.

Q. It has been said a part of the treatment of remittent fever would be injurious in Gastritis? what is it?

A. Emetics. Cathartics. Large dose Tartar Emetic.

Q. What was given as the definition of remittent fever as relates to its similarity with Intermittent fever?

A. It is an intermittent rendered Remittent by some peculiar modifying circumstances.

Q. What is that circumstance?

A. An irritation or inflammation of some organ or organs.

Q. Does this local affection sometimes exist previous to the development of fever?

A. It perhaps does in a slight degree.

Q. What is the fact concerning the intensity of the local inflammation and the remission?

A. The more intense the inflammation generally the less will be the remission.

Q. What is there concerning the chill acts there being local inflammation existing or not?

A. When there is inflammation in some of the organs there will be no chill perhaps no chilliness.

Q. Are there not cases of remittent Fever in which there is no local inflammation?

A. Yes Sir

Q. What then renders it remittent?

A. An increased degree of spinal irritation

Q. What organs after the Stomach are more frequently affected?

A. Liver Brain Lungs &c

Q. Upon what does the periodicity of this disease depend?

A. An affection of the nervous Centres

Q. Why do you think so?

A. The Functions over which the Cerebro Spinal system of nerves preside more immediately, & in health are Intermitting or Remitting

Q. If it depends on disease in the nervous centres why can it not be discovered by post mortem examinations?

A. Because it is very difficult to detect slight changes that do exist in the nervous centres & it may have existed in the beginning of the Fever but afterwards disappeared.

Q. What is the ground for the latter statement?

A. During a case of Fever there is sometimes well marked gastritis which will be suddenly relieved on the supervening of Bronchitis.

Q. What would favor this theory of Remittent Fever as regards the fatal termination?

A. It is those cases that the local inflammation

tion is most intense which generally terminate fatally therefore rendering it probable that the primary affection has ceased to exist in its own locality.

Q. What was said of the treatment by Dr Ford?

A. He would give us the treatment experience had sanctioned.

Q. When a physician is commencing or prosecuting the treatment of any disease what should he at all times propose to himself?

A. Some distinct object to be accomplished. Some indication to be fulfilled.

Q. How may the treatment of remittent fever be divided?

A. That which is proper during the remission & that during the paroxysm including the treatment for local disease.

Q. What is the primary indication in the treatment of Remittent fever?

A. To prevent the recurrence of the paroxysm.

Q. Do you suppose Remittent fever may be suddenly checked?

A. The return of the paroxysm may be prevented as well as in intermittent fever.

Q. How would you attempt to prevent the return of ~~the~~ the paroxysm or stop the progress of the fever?

A. By the use of Sulfate Quinine.

Q. Would you give Quinine before you practiced evacuation giving Cathartics or in a case of simple remittent fever?

A. Yes Sir. I would give it after the first paroxysm was over.

Q. What you the result of experience for the Correctness of this Treatment?

A. Yes Sir.

Q. What is there to justify this treatment by experience?

A. The analogy of this is Intermittent Fever. ~~XX~~

Q. In what kind of doses should Quinine be given?

A. In large doses.

Q. If you failed to prevent the paroxysm would not the symptoms be increased in violence?

A. No Sir. ^{they} They would be much diminished by the influence of Quinine?

Q. Should Quinine be given when there is evidence of gastric inflammation?

A. Yes Sir.

Q. Why?

A. Because such cases are of great danger & rapid progress, therefore it is better to check the fever as soon as possible.

Q. Would you not expect to increase the gastric inflammation?

A. No Sir but should such a thing occur it would certainly be easier to treat Simple gastritis than when complicated with R. F.

Q. Why ~~not~~ ^{not} reduce the local inflammation first and then resort to use of Quinine if it be necessary?

A. Every paroxysm would have the effect of increasing the gastric inflammation independent of ~~the~~ your most vigorous treatment.

Q. But you would use in the case of R. F. some other means besides Quinine?

A. Yes Sir.

Q. What do you think of Emetics?

A. They are very good.

Q. When would you give them?

A. By Simple M. Purg. during the remission.

Q. May they not be beneficial when local inflammation exists?

A. They may except in gastritis.

Q. How do they act beneficially?

A. By removing any thing from the Stomach that may irritate it. & by repulsion, relieving the internal organs of Congestion.

Q. What appearance of the tongue would prohibit their use?

A. Red, dry & pointed.

Q. Cathartics are beneficial. to what part of the disease should active Cathartics be confined?

A. The first part.

Q. How will they act beneficially?

A. By removing irritating matter by repulsion.

Q. Name some Cathartics you would prefer to use in the early stage of this disease?

A. Croam Tatar. & Sulph. - Calomel or Salsp. Senega. Magna. & Salts. Com. Cathartic pills

Q. May they be used when gastritis, enteritis or both combined exist.

A. No Sir.

Q. It has been said that large doses of Quinine should be given to prevent the far progress. How much would you give & how often?

- A. Two to 5 every hour.
- Q. Would you confine the use of it to the remission?
- A. No Sir. it may be used before the fever has entirely subsided.
- Q. What is another important means in the cure of Remittent fever?
- A. Revulsion applications to the spine.
- Q. May they be applied during the remission or paroxysm?
- A. Yes Sir.
- Q. What are the ways in which Counter irritation may be produced on the spinal Column?
- A. By leeching Cupping. Singeings & Blisters.
- Q. Which should be used first?
- A. Leeching & Cupping.
- Q. Why so?
- A. Because if the first do not succeed. the others may then be used. Whereas Cupping & leeches cannot follow Blisters.
- Q. Which is the most applicable during the hot stage?
- A. Cupping & Leeching.
- Q. What should you observe in applying Blisters in ~~relating~~ the remission?
- A. They should when practicable be continued as to order during the remission.
- Q. What was said about being without the means of Cupping & Leeching?
- A. That it was a reproach & a disgrace.
- Q. At what part of the Spinal Column would you make these applications?
- A. On the part that is tender to pressure.

Q. When was another application to the
Spine advised do you recollect it?
A. No.

Q. If it was impossible to obtain ice what
would you use then?

A. Cold water affused or sponge &c.

Q. Is emsection generally necessary?

A. Yes Sir. if there be much febrile action

Q. Are diaphoretics sometimes beneficial.

A. They are.

Q. Are they more useful?

A. After the depleting & evacuating means
have been used. on the 4 or 5th day. &c.

Q. Is there much difference in the action
of medicines of this class?

A. Some are refrigerating, others stimulating.

Q. Which is preferable?

A. Refrigerating and evacuating kind

Q. What is a very important medicine of the
latter kind.

A. Tartar Emetic

Q. How is it generally given?

A. With water or some other Tea.

Q. Is there any objection to uniting it with Cherry
Tea?

A. Yes Sir. They are chemically incompatible.

Q. What dose of this & Nitro would you give?

A. $\frac{1}{4}$ grs Tartar Emetic & 5 grs of Nitro. once in 1 or 2 hours

Q. What is another important diaphoretic?

A. Spirit Mindereri

Q. How is this article prepared?

A. Put in a bottle acetic acid & then put

in by small portions Carb. Ammonia as long as it is dissolved. Cork tightly & put it by for use.

Q. What is the object in preparing in this way?

A. To obtain Carbonic Acid gas.

Q. What application to the Feet and Legs was recommended to relieve the headache that is generally present?

A. The warm bath as before presented.

Q. What application to the head?

A. Cold water poured on.

Q. Tell me how you would use this effusion of cold water on the head. Or Nuche?

A. Have an empty Tub placed on a stool at the head of the bed. and another tub filled with water convenient. place the patient down with his face down over the first tub, his forehead on the hand of an assistant, then with a pith helmet continue to pour from some distance a small stream on the back of the head.

Q. What is the principal good effect of emetition in Remittent fever?

A. They remove focus and act revulsively.

Q. What would you use generally?

A. Cold water. Salt & water on 1. Tablespoonful of Soap to 1 pt warm water.

Q. Can simple R. F. be successfully treated by the plan spoken of. without Calomel?

A. Yes Sir.

Q. But in cases of R. F. after 4 or 5 days other principal remedies having been used, if there be no remission, but nausea & vomiting free cordial oppression. Headache &c would you then use Calomel?

A. Yes Sir.

Q. How would you prefer using it?

A. Combined with Spices or Golden Sulphuret of Antimony. With the first in doses of ʒss ʒjss, 3th 5 Calomel. Every three or four Hours until 6 or 8 doses are taken.

Q. How would act beneficially?

A. By relieving congestion of Mucous membrane & the Liver.

Q. Are the affections of the Liver generally Primary or Secondary?

A. Secondary. the result of a previous Puerperium.

Q. Do you think there is generally inflammation of the Liver?

A. No Sir. Congestion?

Q. Would you see a case where large quantities of bile of a yellow healthy color discharged both by vomiting & stool give Calomel.

A. No Sir.

Q. What would be the proper remedy in such Cases?

A. Large draughts of warm water to promote free & easy vomiting & Magnesia & Charcoal to move the bile from the bowels.

Q. Is the nausea & vomiting owing to the admission of bile in the Stomach?

A. Yes Sir. but this is the result of an over excitation caused by previous Puerperium of Fever.

Q. Why do you say it is not the cause of Fever, but produced by it?

A. Puerperia is not accompanied with Fever, but an opposite state of the system. And the

discharges of bile do not generally exist in the commencement.

Q. If there be over excitation of the Liver, would not bleeding be beneficial?

A. It would probably.

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Q. What symptoms denote a great degree of congestion of the Liver in Puerperal fever?

A. Bowels torpid. Secretions diminished. Yellow color of the surface and especially of the eye white covered with a orange brown film.

Q. An extreme congestion is there much bile secreted?

A. No Sir. There is none.

Q. What is the most appropriate remedy to relieve the congestion of the Liver?

A. Calomel given alone, or combined with Spicae & aloes, as follows.

Calomel .5 grs. Spicae 1 gr. aloes 1 gr
Every 3 hours till from 4 to 6 portions are taken.

Q. What do you think of bleeding in this stage?

A. False should be the guide.

Q. What do you think of Bleedings & cups?

A. They are important means applied to the spine and over the region of the Liver.

Q. What is usually the appearance of the urine discharges after the use of Calomel?

A. Black or dark green. Sometimes of natural consistence at others very fluid.

Q. Do you suppose the greater portion of these discharges to be vitiated bile or intestinal secretion?

A. Vitiated or decomposed bile.

Q. Why not suppose that it is an intestinal secretion rendered black by the action of the Calomel?

A. Because the black Ard. of Mercury which it is supposed to be is insoluble. Beside the quantity is too small to color so much fluid were it soluble, & again the same black colored discharges are discovered to the termination of Cases when Calomel has not been used. And bile of the same appearance has been found in the gall bladder & the biliary ducts of the Liver.

Q. What is another important internal remedy for congestion of the Liver?

A. Nitro-muriatic ^{acid} foot bath.

Q. If gastritis exists with congestion of the Liver is Calomel an appropriate remedy?

A. Not very.

Q. Will it increase the inflammation?

A. No Sir. it may prove beneficial.

Q. When inflammation does exist in the mucous coat of the Stomach what would be your treatment?

A. Rigid abstinence. cold water. ice. jessie and (peach leaf tea). Leeches. Cups sinapisms & Blisters to the Spine and Epigastrium. Anulacids & narcotics.

Q. If there be only congestion of the Stomach would Calomel then be a very proper remedy?

A. Yes Sir given 5 grs every 3 or 4 hrs.

Q Is it a universal fact as Jackson says that the more blood there is in part the greater will be the irritability?

Q. Mr. Sir. For irritants are the best remedies for inflammation.

Q. Is it ever requisite to produce salivation in fever?

A. No Sir. it is useless & unscientific.

Q. Are fevers sometimes cured by producing salivation?

A. No Sir. They would probably have got well without it. you cannot produce salivation during inflammatory fever, it is after the fever subsides that the ~~fever~~ salivation occurs.

Q. How would you use Calomel without the danger of salivation.

A. Give laxatives to remove it from the bowels if it does not pass off itself.

Q. When the Liver is diseased either by great congestion or inflammation will not the blood become vitiated and impure?

A. It will. because the material for the production of bile is left in the blood.

Q. How would you attempt to purify the blood beside operating on the Liver.

A. By exciting all the excretory organs, as the skin, kidneys, intestines &c &c

Q. Is it proper to permit a patient who is sick in a Calomel to drink cold water?

A. If there be a great degree of fever existing it will be proper to let the patient drink cold water if there be not much vascular ~~action~~ ^{action} ~~and~~ it will be the safer plan to inhibit the use of cold water to some degree fearing the Cathartic action of the medicine may be

prevented, by a salivation ensued.

Q. What symptoms will declare the brain to be considerably affected in Remittent fever?

A. There will be intense pain of delirium, or alternations of each - Intolerance of Light. The bowels generally torpid - the head hotter than other parts of the surface.

Q. Does gastritis & Enteritis frequently exist together in R. Fever.

A. Yes Sir.

Q. What would be the treatment to relieve the head?

A. If the pulse is strong & hard or full. bleed, generally or locally. If not local bleeding by leeches. Hairs to the temples. Sinapisms to the temples & the extremities. Active Cathartics, affusion of cold water on the head. Sinapised foot bath.

Q. If Gastritis existed at the same time would you not modify the above treatment?

A. No. Active Cathartics should not be given, but use stimulating injections. Be careful to the Epigastrium & do not forget to apply sinapisms to the spine.

Q. About what period is Remittent fever most apt to change into what is called the typhoid state or Typhus fever when not treated or improperly treated?

A. From the 7. to the 10th day.

Q. What are the symptoms marking this typhoid to have ensued?

A. The remittancy will be destroyed. great prostration will supervene - a more frequent Pulse, Black tongue, teeth & gums increased.

with, black sordes, a deranged state of the sensorial functions, low muttering delirium, *ptechiae nigrae*, &c.

Q. What prognosis would you generally form of a case of this kind?

A. Unfavorable, but not hopeless.

Q. What did Dr Ford request you to do particularly in treating subcutaneous fever?

A. To give the treatment he has advised a fair & judicious trial. Use genuine & topical applications to the spine, notwithstanding all opposition.

Q. Will Quinine often produce headache?

A. About as often as Opium will purge.

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Q. What is the name to what is termed Infantile Remittent Fever?

A. All persons under 12 years of age.

Q. What do the first symptoms of this disease always indicate?

A. Gastric Disorders.

Q. By what is this fever most frequently excited?

A. By food of improper quantity & quality.

Q. What are the characteristic symptoms of this disease?

A. Extreme irritability of the stomach. frequent watery discharges from the bowels. tenderness & pressure on the Epigastrium. lymphatic abdomen. dry red tongue. miliary occurring daily.

Q. What kind of weather as regards its thermometrical state is most favorable to the production of this kind of fever.

A. Hot weather.

Q. Upon what is it supposed this disease depends?

A. Upon worms.

Q. Is it injurious to practice upon such a supposition?

A. It is. Particularly in the early stage.

Q. By what is the latter stage marked?

A. Symptoms indicative of the existence of hydrocephalus.

Q. After the occurrence of these symptoms are there denoting the diseased state of the alimentary Canal effected?

A. Materially mitigated.

Q. Is Hydrocephalus dangerous?

A. Very.

Q. What then would be your treatment in this case?

A. To combat the inflammation of the alimentary Canal by proper remedies.

Q. Name some appropriate remedies?

A. Emetics of Ipecac. or warm water. Calomel 1 gr. Rhubarb 1 gr Ipecac 4 gr once every 2 or 3 till 4 or 5 portions are taken.

Q. Would you use drastic cathartics.

A. No Sir

Q. What is another mild cathartic that may be used?

A. Castor oil.

Q. Is warm bath a proper remedy?

A. Very beneficial indeed.

Q. If the brain becomes affected what will be the condition of the bowels.

A. Torpid.

Q. What is the treatment of Hydrocephalus supervening in this fever?

A. Active cathartics cold affusions to the head, blisters to the Extremities & back is to the temples.

Q. Is there danger of the cold affusion producing any other disease?

A. Sometimes it will produce bronchitis.

Q. Does not bronchitis sometimes occur when the cold affusion has not been used?

A. It does not unfrequently.

Q. How may a knowledge of these facts prove serviceable?

A. By noticing closely for the first symptoms of that disease and using the appropriate remedies.

Q. What is the unnatural sound called which is heard at the commencement of bronchitis?

A. ~~Sibilant~~ ^{Sibilant} respiration.

Q. Where does Yellow Fever most frequently occur?

A. In malarious Cities & hot climates.

Q. Is it called by a variety of names?

A. Yes Sir.

Q. How this fever usually commence suddenly?
 A. It does.

Q. Give the most prominent symptoms of the first stage or paroxysm?

A. Pains in the back, body & limbs, redness of the eyes, intense headache, dry hot skin, flushed face, tormenting thirst, nausea & vomiting, heat & tenderness in the Epigastrium, intellect not impaired, bowels torpid, extremities cold, pulse various, nearly natural; frequent strong & hard; frequent & feeble, & the muscular strength not much impaired.

Q. How long does this paroxysm continue?

A. From 24 to 72 hours.

Q. Does a marked remission then occur?

A. Yes Sir. There is an abatement of all the symptoms.

Q. How long does this continue?

A. From 6 to 12 hours.

Q. What succeeds this remission?

A. A more violent paroxysm.

Q. Give some characteristic symptoms of it?

A. Skin becomes yellow, black aliquid discharged, vomiting or gulping up black matter, delirium, disagreeable breath, extremities clammy & cold, hiccough, haemorrhage &c.

Q. To what is the matter vomited compared?

A. Coffee grounds suspended in a clear fluid.

Q. Is the black matter discharged from the bowels of the same character as in remittent fever?

A. No Sir. the black flocculi are perhaps of the same nature as that vomited.

Q. Do think this fever contagious?

A. No Sir

Q. What is meant by the contagion of yellow fever

A. That patients laboring under yellow fever generate a morbid principle by which the disease can be communicated to another either by contact or by coming within the sphere to which the poison extends in the atmosphere

Q. Is it a fact that nurses of yellow fever patients generally take the disease?

A. If the patient remains in the situation where he took the disease the attendants on such a patient does frequently become attacked but if the patient be removed to a pure atmosphere nurses are not attacked

Q. Why do those who are much with the sick at times escape an attack when in a pure air and take the disease when in a contaminated air.

A. Because in the latter case the nurses are exposed to the same original cause but in the first they are not

Q. Does not the non-contagious character of this disease fully exemplified during its prevalence in this City?

A. Yes Sir

Q. In what way?

A. By the numerous families on the 8 and 9th Sts who received the yellow fever patients in their houses none of whom took the fever except those who visited the City.

Q. On what do you suppose the origin of this

disease depends.

Q. On the decomposition of animal & vegetable matter.

Q. Is this miasmata then different from that which produces Intermittent & Remittent Fever?

A. It is.

Q. What proof for that opinion is there?

A. The residents of localities where this disease is endemic are such liable to be affected by this, but they are often affected by remittent fever.

Q. What predisposes to Yellow Fever

A. Residence in temperate climates. The sanguine temperament. & those persons who are ^{now} acclimated to the regions in which it prevails, and who become predisposed to an attack by temporary residence in a more temperate climate & return to these.

Q. Is there any difference in the predisposition or liability to attack in regard to age or sex

A. Females. Children & negroes are not so liable.

Q. What organs are principally affected in this disease

A. Stomach. Liver & sometimes the intestines

Q. Why do you think these organs more affected

A. From the symptoms & post mortem examination.

Q. What is found in the Liver & Gall Bladder

of persons who die from yellow fever?

A. Black viscid bile.

Q. Do you consider this a constituent of black vomit?

A. No Sir.

Q. What forms the black matter vomited?

A. It is (in its appearance) blood discharged which is the consequence of an active inflammation of the mucous coat of the stomach.

Q. Can blood ever assume this appearance under any other circumstances?

A. It does whenever it loses its vitality and is confined to in the tissue surrounding, as in ecchymosis produced by a blow, or a part passing from active inflammation to sanguine.

Q. How did Magendie produce black vomit from a dog.

A. By injecting into his veins water which had been in contact with putrid meat.

Q. Is bloodletting an appropriate remedy in this disease?

A. It is.

Q. What would be your object in bleeding?

A. To divert the blood from the inflamed parts and thereby lessen the vis a tergo on the overdistended and diseased capillaries.

Q. How would you bleed for this purpose?

A. Place the patient in an erect posture & make a free orifice.

Q. Would you use local bleeding?

A. Yes on the inflamed part.

Q. Would you use revulsives to the spine?

Yellow Fever

Q. By all means.

Q. Do you think Emetics advisable

A. They have been used with advantage in the early stage of the disease

Q. What circumstances render emetics more particularly serviceable

A. When a patient has eaten a full meal or the disease is of the Congestion form

Q. Would you use Salts & Tartar for an Emetic.

A. No Sir, but they are said to have been used beneficially.

Q. Would you use Pectoral Cathartics?

A. If the tongue be red & contracted they will probably prove injurious. if the tongue be yellow or brown they may be used without much risk

Q. Is it proper to use Calomel as a cathartic if you use any?

A. Yes Sir it is the best.

Q. At what time would you use Stimulants

A. When the work of disorganization is about to commence. That is when the Capillaries are over distended and have lost their contractile power. upon the same principle that a Blister is applied to a part about to enter into Gangrene

Q. What are some of the Stimulants that may be used with advantage at this time?

A. Cassia. Turpentine. Hoffman's Anodyne Sulphuric Ether. Brandy. Blisters to the Epigastrium.

Continued Fever

Q. Do fevers frequently occur in this Country that are Continued

A. Very rarely.

Q. How is Continued Fever defined (Dr. Boock)

A. A Fever in which there is a regular increase & decrease in the violence of the symptoms with a tendency to remission once in 24 hours.

Q. Is there not usually an increase in the violence of the symptoms of all fevers during the after part of the day.

A. There is.

Q. How would you explain that fact?

A. That the system was reacting in consequence of the various exciting agents that had been acting upon it during the day.

Q. How are continued fevers divided

A. Synocha. Synochus & Typhus.

Q. What is meant by Synocha fever?

A. An inflammatory fever in which there does not necessarily exist a local inflammation

Q. Give the most prominent symptoms of this fever?

A. Promonitory stage short. Distinct chill. Febrile action rapidly developed. Surface hot. Pulse full & strong. flushed face. eyes suffused. & sensitive to light, head painful, breathing oppressed. great thirst. tongue covered with white fur. urine scanty & highly colored. Skin dry. Sometimes delirium.

Q. Do these symptoms increase & decrease in

regularly in 24 hours

A. There is a tendency to a remission in the morning with an exacerbation in the evening

Q. This is called an idiopathic fever. but are not the local phlegmasia generally attended by the same symptoms?

A. Yes Sir

Q. How are the causes producing this fever divided?

A. Into Internal & External

Q. What are some of the External Causes?

A. Intensity Hot or cold weather or sudden change from one to the other. Intemperance &c

Q. What are some Internal Causes?

A. Mental Emotions Muscular exercise &c

Q. What is the treatment for this form of fever

A. The vigorous use of the Antiphlogistic treatment

Q. What is necessary to constitute this local event?

A. Bloodletting. Cathartics refrigerants. Astringents. Diaphoretics &c

Q. What are some of the other names by which typhoid fever is known?

A. As a term asthma, fever. Camp. of Sails of - ~~stomach~~ f. Haemorrhagic follicular enteritis.

Q. How long is the formonitory stage of Typhoid fever?

A. From 3 to 6 days.

Q. What are the symptoms marking this stage?

a. Anorexia in the stomach. no appetite good
 rep, nausea, pale sunk dejected countenance.
 Minor of the hands. weakness muscular de-
 bility uneasy sensation in the limbs.

9. What succeeds these symptoms?

a. a chill alternating through its course
 with flushes of heat. attended with a cold
 moist skin. foul tongue. nausea & vomit-
 ing.

3. How long will this stage continue?

a. From 11. to 13 hours

9. What then comes on?

a. The stage of excitement or reaction?

9. What are the symptoms of this stage?

a. Surface becomes hot. Pulse now in strength
 & fullness, Thirst, Tongue. Furred & bluish
 livid & delirium during the night. oppres-
 sion in the chest. Sleeplessness. diarrhoea
 pulse small frequent & irregular & copious
 perspiration.

9. How is Typhus divided?

a. Into mild and grave

9. Will the symptoms named apply to both
 forms?

a. They will. being more or less violent.

9. What course does the mild form take
 after the presence of the last named sym-
 ptoms?

a. Those symptoms after continuing from 2 to 6
 days become mitigated. and the patient
 recovers.

9. What are the symptoms of Typhus grave?

malignant form?

A. These symptoms last ^{increase} unremitted, in violent there is a sinking or ebbing in the Epigastrium. Extreme nausea & vomiting, a streak of red along the middle of the tongue, the ~~other is covered~~, the other portion is covered with a dark or black fur. Gums become encrusted by black scabs. Great prostration. pulse more frequent & full. Constant delirium. Subultus Feridinum. Calor mordax. Tympanitic abdomen. a slight moisture which does ^{not} diminish the heat of the skin. Great thirst. tongue covered with black thick crust, interrupted by fissures exposing ulcerated surface. Breath very offensive, Copious bowels. Discolored spots on the surface. caused the effusion of blood. putrid Cadaverous odor.

Q. How long does this form of Typhus last?
Continues?

A. From 14 to 50 days.

Q. Do local inflammations occur which modify these symptoms?

A. Frequently.

Q. Is the cause of Typhus tangible or can it be insulated?

A. No Sir

Q. When does the disease most frequently occur.

A. In cold climates, in Hospitals. Sails Camps.

Q. Among what Classes does it occur most frequently?

The filthy & intemperate poor.

Q. Does it not sometimes occur here?

A. Yes Sir. but rarely in whites generally in negroes.

Q. Do you suppose the cause of this fever to be of animal origin?

A. I do.

Q. Is it necessary that the virus should emanate from one having the disease to produce it in another?

A. No Sir

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Q. Do you believe the exciting cause of Typhus fever exists in gaseous form?

A. I do

Q. Through what surface does it gain admission into the system.

A. Through the Skin. Pulmonary & digestive mucous membranes.

Q. How are you ^{to} ascertain upon what tissue or organ it acts primarily?

A. By an observation of the effects produced.

Q. Do you suppose the poison producing Typhus fever is introduced suddenly or gradually into the system?

A. Gradually.

Q. What are the consequences first observed by the gradual introduction of this poison into the system.

A. Sluggishness of the mind. Confusion of ideas. distaste for study. dullness of perception. mental imbecility. disturbed sleep. a dullness in the organs of sense. An indifference to objects that were before pleasant. An aversion

Excitation, moraine, restlessness. then comes a disorder in the action of the Heart, Lung & Stomach.

3. How long do these symptoms continue?

A. From 3 to 5 days.

Q. You would suppose infer then that the effects of the poison began to be manifested when it commenced to act on the System?

A. Yes Sir.

Q. Considering the premonitory symptoms that have been just mentioned. on what tissue organ or organs would you be induced to believe the deleterious action of the of the poison was first exerted.

A. Upon the Brain & Spinal Marrow

Q. But is Typhus fever always preceded by these symptoms (premonitory) mentioned above?

A. When not supervening on a fever of another form.

Q. What is that fever called which has all the prominent symptoms of pure Typhus which sometimes occurs during Relapsent or Intermittent fever?

A. Typhoid fever.

Q. What not to be presumed that the poison having entered into the blood that it will become vitiated and produce other disorders in the system beside those of the brain & Spinal.

A. Certainly. The Brain & Spinal marrow being primarily affected. and thereby unable to supply the proper quantity and quality

of nervous influence to the different tissues the harmony of the system is disturbed & the various tissues predisposed to be acted upon by the blood in a vitiated state.

Q. Is not only the circulatory system is deranged but local inflammation would likely occur would it?

A. Yes Sir

Q. In what organs do inflammation most frequently take place in Typhus?

A. Lungs, Stomach. & particularly the small intestines.

Q. Is it believed by some that the primary seat of this disease is in the small intestine?

A. Yes. in the small secretory bags or cysts which exist in the mucous membrane of the small intestines. & more abundantly in the Stomach.

Q. How are these cysts arranged in the Stomach?

A. In elliptical plates

Q. Do these plates generally indicate disease when examined in persons dead of Typhus?

A. They frequently do. Some pathologists say they always do others say they are the evidence of Typhoid & not pure Typhus Fever.

Q. What is the appearance of these plates when diseased?

A. Red. Tumefied or enlarged. or ulcerated

Q. Are anatomical lesions usually discovered in the Brain & Spinal marrow.

A. No Sir

Q. Does that fact prove that the primary

seat of the disease is in the cysts ~~of~~
~~the~~ of the Small Intestines?

A. By no means

Q. Why not?

A. The prognostic do not indicate that there is any disease of the follicles. the change that is ordinarily discovered in them are not sufficient to produce the symptoms which exist in Typhus fever. In endemic malarial fevers of long standing in hospitals every symptom of Typhus is present often, yet no change was discovered in these follicles. No one would regard the cutaneous surface the primary seat of Small Pox, Scarlatina, or measles &c cause them are eruptions on the skin. Again it is an indisputable fact that while in the first stage of infantile remittent fever there exists inflammation of the stomach & intestines, yet in the latter stage of the disease all trace of disease in these organs are gradually lost by the occurrence of hydrocephalus.

Q. Can you not easily account for the prostration of which attends Typhus fever which by the diarrhoea which is the consequence of disease of the mucous membrane & follicles of the small intestines as by any other circumstance that occurs in Typhus?

A. No Sir. Prostration precedes the diarrhoea

Q. How then would ^{you} account for it?

A. By the continuance of fever

Q. In the organs which perform involuntary

action incessant in their action.

1. They are. They will become weary and exhausted from an unnatural action as well as the voluntary muscles.

2. Is not the heart always in action?

A. Yes Sir, each portion of the heart rests half the time.

3. What are the number of systoles and diastoles of the heart in a minute?

A. About 60.

3. What number in Syphilis given

A. About 120. to 160.

4. You would suppose that in the latter case the heart's action was continuous and that it must become wearied. Would you not?

A. Yes Sir

5. Will this deranged action produce a derangement in the secretions?

A. Certainly

6. Will not this still tend to establish or keep up local disease?

A. Those particles may be retained in the blood which should have been abstracted from it by a secretory process & vice versa.

7. Can you account for the petechial spots which appear on the surface of the membranes?

A. Yes Sir. The exhalant vessels having been irritated by the impure blood, take on an increased action which is still kept up by the blood becoming more vitiated every round it goes, they at length become worn out, exhausted, & have at length to submit to the

distention of thin coats with blood.

3. What do you think of Typhus Fever being treated by bloodletting?

A. It is sometimes an appropriate remedy.

4. What should be the treatment in the previous stage?

A. Let the patient drink freely of diluent drink warm, for the purpose of producing copious diaphoresis.

5. It has been said that the brain & spinal marrow are affected. What is the nature of the affection?

A. Inflammation of a peculiar kind.

6. How would you abstract blood during the stage of excitement?

A. Venesection should be practiced according to the age & condition of the patient. Local bloodletting by Leeches & Cups to the upper portion of the spine and behind the ears.

7. Would you think Emetics serviceable?

A. Yes. Elix. Spess is the best aided by warm Camomile Tea.

8. Would you use Cathartics?

A. Yes. Elix. Salts & Seneca Snake Root.

9. Why use the snake root?

A. To produce diaphoresis. The Seneca or Virginia snake root should be continued throughout the course unless there be much excitement. Then the refrigerant & diaphoretics should be used.

10. What do you think of extensive Blisters to the spine?

Q. They are objectionable, the space they occupy should be reserved for Suckles & Caffey
and.

Q. Would you use Calomel.

A. Yes Sir. It may be used for its cathartic
or for its specific alterative effects.

Q. Is it generally difficult to produce
Erysipelas in these Cases?

A. Exceedingly.

Q. No cases in which it is produced gener-
ally recover?

A. They do.

Q. What medicines would you use in a state
of Collapse?

A. Opium. Camphor. Carb Ammonia. &
Particularly Quinine grs. 1. per hour.

Q. Would you employ blisters in these Cases?

A. If the tendency to putrescence be not great
they may be beneficial.

Q. What medicines are recommended when there
is a tendency to putrescence.

A. Chloride of Soda & Lime.

Q. How do some divide Typhus Fever.

A. Into 3. varieties. Simple, Inflammatory
& Congestive.

Q. What are symptoms of the Congestive?

A. An entire want of febrile reaction after
the stage of oppression, the vital powers
appear overwhelmed & depressed the whole
time the surface pale. The pulse strug-
gling small and feeble.

Q. Would you bleed in these Cases?

Q. Yes Sir. The debility & oppression are apparent not real

Q. What else would you do to recall the blood to the surface?

A. Use the hot bath, the sinapised bath or a stimulating application to whole surface composed of Oakt & Ammonia. Emetics are also valuable in this form.

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Q. What do you understand by Phlegmasia

A. A local inflammation with general fever

Q. How are the different Phlegmasia distinguished

A. By the organ affected.

Q. What was the classification made by Pirella?

A. He made five. Cutaneous. Mucous. Sinus muscular & Synovial.

Q. Are the symptoms manifested by these different tissues when diseased different one from the other?

A. Each tissue manifests its own peculiar symptoms?

Q. What are the circumstances characteristic of an inflammation of the skin?

A. The pain is severe, the inflammation irregular & rapid. Progresses rapidly & terminates in suppuration or desquamation or ulceration

Q. Do you consider the Furunculus as a model of inflammation of the skin?

A. I do.

Q. How do you distinguish ^{inflammation of these} mucous tissues from the others?

A. The pain is not very severe & is of a burning character; ^{at first} accumulation of the secretions; of

towards the quantity is increas'd. this is
 some tumefaction it terminates generally in
 resolution.

2. But is there not sometimes severe pain in inflammation of the mucous membrane?

A. There is, as in dysentery, colic or arduo urine, but it is always owing to an obstructive circumstance, is depending to the irritation by the faeces or secretion.

2. What ^{are} the symptoms that attend inflammation of the serous tissue

A. Auto lancinating Pain very little tumefaction, rapid progress, effusion of serum. forms adhesions.

2. By what is inflammation of Fibrous or synovial tissue marked?

B. Violent aching pain. little or no tumefaction. terminates in exudation of the serum or a gelatinous fluid. or deposition of earthy matter.

2. By what is inflammation of the muscular or parenchymatous tissue marked?

A. Great tumefaction, slight pain but throbbing from ^{heat} suppuratation.

C. With our general treatment apply to all the phlegmasia?

B. Yes Sir.

3. What is that treatment.

A. The anti-phlogistic

S^o Par 244

2. Is the diagnosis of disease in the Brain and spinal marrow generally so clear & definite as in other parts of the system?

A. No Sir.

C. Why not?

A. Because these organs being surrounded by

being parties the most certain means of ascertaining the nature of disease cannot how be used

Q. What are these most certain means?

A. The exercise of the senses

Q. Are not the viscera of the thorax alike situated?

A. Yes Sir. The functions exercised by the thoracic organs give rise to appreciable sounds, not so with the brain or spinal marrow.

Q. Upon what then are you dependent for a correct knowledge of the diseases of the brain & spine?

A. Physiology principally. aided by pathological anatomy.

Q. To understand the physiology will you must first understand the anatomy of the part. Should I now?

A. Yes Sir.

Q. Do you suppose that it requires all the cerebral mass to perform one function?

A. No Sir.

Q. Do different parts of this mass differ in appearance & anatomical structure

A. Yes Sir.

Q. Is this not a strong argument in favor of the opinion that different parts perform different functions?

A. Yes Sir.

Q. What other proof is there of this fact?

A. Optic & auditory nerves originate in the brain & yet they perform functions as different as are the eye and ear.

Diseases of the Brain & Spinal marrow 5

2. How are the functions of the nervous system divided?

A. Into 3 Class. 1. Sensation. 2. Intellectual. 3. motion

Q. What anatomical divisions are there in the spinal marrow?

A. It is divided into two ^{hemispheres by an} ~~anterior-posterior~~ line & each hemisphere is divided ^{into} ~~by~~ an anterior and posterior Column by lines which exist laterally.

2. Are the fellow parts of nerves coming from the Anterior & posterior different in their functions?

A. Those of the anterior are nerves of motion - of the posterior are nerves ~~of~~ of sensation.

Q. Into what part of the contents of the Cranium may the Anterior Columns of the Spinal marrow be traced?

A. Into the ~~Corpora~~ ~~olivaria~~. Pyramidalia, Medulla oblongata, Crus Cerebri, Chorda nervorum & Spiculae & Corpora Striata

Q. Into what may the posterior be traced?

A. Corpora retiformia & Crus cerebelli

2. What occurs in regard to the two anterior Columns just as they enter the Cranium?

A. They cross. The right passes to the left & vice versa.

Q. Now what occurs in disease go to prove this anatomical fact?

A. See Lin.

Q. What are the functions of the nervous cords?

A. They are the means of communication between the parts which give sensation. And parts that receive it.

Q. What part exercises the function of giving

sensation and the will of motion.

Q. Some part of the contents of the Cranium.
Probably those parts with which the Anterior Cord
is continuous, perceive our motion & those with
the posterior, our sensation.

Q. Where are the intellectual functions performed?

A. Within the Cranium.

Q. By what performed?

A. Perhaps the different intellectual functions
by different parts of the brain.

Q. How can you conceive matter to perform such
functions as Geography, imagination &c.

A. As it is a more evident supposition than that
the optic nerve has the power of measuring the im-
pression of light or acoustic nerve, sound
when there is no little difference between them & is
not the volume of the brain found to be in-
direct ratio with the exercise of these functions
as in infancy & old age. When these functions
are not so much exercised is not the brain
smaller than in the adult.

Q. Will not an injury of the sensitive por-
tion of the brain produce disorder in the intel-
lectual powers, or functions?

A. Yes Sir.

Q. Will may you not then upon the same
principle that you consider a vitiated state of
the bile depends upon an abnormal condition
of the Liver, suppose that disordered intellect-
ual functions depend upon an unnatural
condition of the Brain?

A. Certainly

Q. Is it not reasonable to infer that the same relation exists between the intellectual functions & the brain that does between the bile & Liver?

A. That the relations are similar in disease is evident; why they should not be in health I am not able to say.

Q. What is the proximate Cause of syncope?

A. Diminished quantity of blood in the brain which is evident from the effect of placing a patient in the recumbent position or with the head depending.

Q. What is meant by Corticism?

A. A singular malformation of which the most remarkable examples are met at the base of the Alps, & ~~also~~ some of the unhealthy districts of France.

Q. What deformity is there in the cranium of the Cretins?

A. The forehead is flattened & retreating giving the cranium somewhat the shape of a cone.

Q. Have Idiots generally a deformity of the organization of the Brain?

A. Yes Sir corresponding with the idioey.

Q. Give an instance of a physical cause producing a species of Idiotism.

A. Traumatic Spirits produce Idiotism Tremens.

Q. In mania is there not found in the brain physical changes when examined after death?

A. Perhaps uniformly when the examination is made by the experienced and with proper care.

Q. Are there not frequently very conspicuous changes

in the ~~circumstances~~ ^{portions} of the brain
in persons who were married?

A. Sometimes there is the appearance of Empi-
elations inflammation. at others red spots
may be discovered.

Q. What method now you advised to prac-
tice in diagnosing diseases of the brain or its
membranes?

A. The method of Exclusion.

Q. What is meant by that.

A. It is the act of examining each organ sep-
arately. When one is found to be free from
it is to be excluded from consideration.

Q. How are the diseases of organs within the
cranium divided?

A. Into Acute and Chronic.

Q. What is the term applied to inflammation
of the membranes of the Brain?

A. Meningitis sometimes Phrenitis.

Q. How is meningitis divided?

A. Acute and Chronic.

Q. Are these membranes charged with the exer-
cise of nervous functions.

A. They are not.

Q. Are not nervous symptoms present in
meningitis?

A. Yes, but they are caused by the inflamma-
tion extending to the brain, or by pressure.

Q. How many stages are there in acute Menen-
gitis?

A. The forming, or irritative; Inflammatory;
terminating or ~~affected~~ stage of effusion.

Menenge

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- Q. Now the forming stage generally, with a chill ^{commence}
- A. Yes Sir, as in other phlegmasial
- Q. Is there much vascular excitement after the chilliness
- A. Yes Sir the pulse is frequently full & strong
- Q. Give the symptoms that make up this stage
- A. Violent pain in the head, face flushed, eyes injected & bright, intolerance to light and sound, quick and rapid exercise of the intellectual functions & motion, Malaise & vomiting
- Q. In what part of the head is the ^{pain} located
- A. Generally in the frontal region.
- Q. How long ^{does} this stage continue?
- A. From one to 4 days
- Q. What are the symptoms of the second?
- A. Furious delirium, eyes upon injected face convulsed, the ^{patient} cries out, resists attendants, the system is in a continued state of restlessness and agitation
- Q. What are the symptoms of the third stage?
- A. Coma, distorted features, pupils dilated, rigidity of some of the muscles, a sunken and cadaverous appearance of the features, no pulsation
- Q. Is it not important to understand the characteristic and diagnostic symptoms of this disease?
- A. It is. In order that it can be determined between it & other ~~head~~ affections which are of so frequent occurrence particularly in ~~fever~~
- Q. Are the diagnostic symptoms coincided by a disorder in the functions of animal or organic life?
- A. ~~Animal~~ No the functions of sensation, motion

the intellectual Functions.

3. Is there anything peculiar in the pain of this disease that would serve as a diagnostic symptom?

A. It is of a violent and intense character the physicians attention will be directed to it by the continual expressions of the patient. Who will tell you his head feels as if an immense weight rested upon it or as if bound tightly by a cord. It will not be relieved or increased by bandage or pressure or by motion.

4. Is it confined to the head?

A. It is.

5. Is the pain continuous?

A. It is generally of a continued form, though increasing & decreasing ⁱⁿ violence. It does sometimes intermit.

6. Can you depend on this as diagnostic?

A. No Sir. The pain is sometimes more expressed by the patient because of early & continued delirium.

7. What is there about the eye that will serve in forming a diagnosis?

A. In the early stage the pupil will be contracted & in the latter dilated. & Strabismus frequently occurs which must be taken in connection with other symptoms in diagnosing.

8. What disorder or suspension of voluntary motion is characteristic of Menengetis?

A. There is inaction in the limbs particularly the upper Extremities. *Subultus brachiorum*,

incessant rolling of the head. Convulsions often in spasms of the muscles, The hand clenched & firmly fixed to the breast or chin. The head is drawn back, forcibly. There is sometimes entire loss of motion in one eyelid only. Sometimes hemiplegia or paraplegia occurs.

Q. What disorder ^{is there} in the intellectual functions upon which you can rely in diagnosis Mucungitis?

A. Delirium is a uniform occurrence it is continued. It abates & increases but does not go off. It differs from delirium recurring in fever being preceded generally from three to 4 days by violent pain. Coma almost invariably occurs in the latter stage of the disease.

Q. Is not the Delirium sometimes intermittent?

A. Yes Sir.

Q. Is there generally loss of appetite in acute M.

A. Yes Sir.

Q. Is the tongue always changed in appearance?

A. No. but it is frequently.

Q. Is not a red dry tongue frequently present?

A. It is not.

Q. Is it indication of inflammation of the stomach when present?

A. Yes Sir.

Q. Are not nausea and vomiting invariable symptoms?

A. No Sir. They are sometimes absent.

Q. No nausea & vomiting sometimes exist with a natural appearance of the tongue?

A. Yes Sir.

Q. Is tenderness to pressure on the the Epigastrium always present when nausea & vomiting are?

A. No Sir

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Q. Are the intestines usually torpid or are they unnaturally excited.

A. They are generally indolent, not moved by ordinary doses of Cathartics

Q. Is there generally pain for the whole the abdomen is pressed on?

A. No Sir

Q. Is the function of the Circulation regularly disordered?

A. No Sir.

Q. But it generally is. is it not?

A. There is generally a strong & frequent pulse, flushed face, & injected eyes, but sometimes the pulse is natural or weak the face pale & the conjunctivae white

Q. Is the Cellular tissue which exists between it and the arachnoid and dura mater generally found disorganized -

A. Yes Sir.

Q. What unnatural disposition is generally found in this layer of Cellular tissue.

A. There may be Pus, Serum or Blood.

Q. Is the layer of Cellular tissue which connects the arachnoid to the pia mater generally distended by pus. Serum or Blood.

A. It is

Q. Is the Pia Mater generally altered?

A. It is

- Q. Is there frequently an effusion in the ventricles of the Brain?
- A. Yes Sir. Effusion of serum, serum or blood
- Q. Is there always a change in the substance of the Brain?
- A. The alteration may frequently ^{with} be detected.
- Q. What is the condition in which the substance of the brain is frequently found?
- A. Softened. The blood vessels congested or blood poured out in numerous parts.
- Q. What is the treatment of acute Meningitis?
- A. Antiphlogistic
- Q. Mention in a general way the proper remedies.
- A. Bloodletting Cathartics Emetics. Antimonials
Blisters, Pouring cold water, good nursing
Position & Diet.
- Q. Would you bleed if the pulse is weak
Face pale, and the Conjunctiva white?
- A. Yes Sir. The circulation will increase by letting
- Q. Would you use local bloodletting?
- A. Cups to the Temples. Leeches upon the
jugular veins & behind the ears
- Q. Under what circumstances would you
use Emetics
- A. If the Stomach contained much food it would
be prudent to empty it by Emetics. They are not
inadmissible except when be gastric inflammation
- Q. What would your object in using Cathartics
- A. To produce Revolution
- Q. What cathartic would you prefer (oil)
- A. Calomel & Salap. Cream Tar. & Solap. or Croton

Q. Under what Circumstances would you prescribe Calomel, alone?

A. When there was nausea & vomiting.

Q. How would you administer Croton oil.

A. Bread crumb, \mathcal{R} . S. 5 grs Croton oil made into 4 pills.

Q. If there was gastric or intestinal inflammation would you use Cathartics?

A. Not by the mouth.

Q. What Injection would you use?

A. Spt Sulphur 2 \mathcal{z} . Castor oil 3 or 3 Table Spoonfuls. the same quantity Brown Sugar on Egg beat them well together then 1 pt agar Introduce a long flexible tube, & inject through it.

Q. When would you consider the antivenereal proper?

A. When there was considerable arterial excitement a dry skin but no evidence of gastr. intestinal inflammation.

Q. When would you use Blisters

A. When there was not much vascular excitement.

Q. When would you apply them?

A. To the Extremities.

Q. Is the pouring of cold water on the head important?

A. Yes Sir.

Q. What would you add to the warm foot bath to render it more efficacious, as a revulsive.

A. Mustard.

Q. What position should the patient maintain

A. As nearly erect as possible. can

Cerebritis

90.

sustaining the convenience & comfort of the patient?

Q. Would you subject the patient to abstinence from food?

A. I would.

Q. What term is applied to inflammation of the Brain?

A. Cerebritis or Encephalitis.

Q. What are the principal marks of difference between Cerebritis & meningitis?

A. The delirium occurs earlier & not preceded by the violent acute pain and there is more marked disorder in the voluntary muscles than in Meningitis.

Q. Are both the membranes and brain generally diseased in either meningitis or Cerebritis?

A. Yes Sir. One perhaps is more in a state of inflammation without its extending to the other.

Q. What is the most common change observed in post mortem examinations as the consequence of inflammation of the brain?

A. A post mortem softening.

Q. What is the treatment for Cerebritis?

A. Vigorously Antiphlogistic.

Q. Should it be carried to a greater extent than in Meningitis?

A. Yes Sir. The same means may be used in greater degree.

Q. What is meant by hydrocephalus?

A. It is an effusion in the ventricles or the ara

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Hydrocephalus

Shroud coats occurring as symptoms or circumstances in Meningitis or Cerebritis.

Q. What is the object to be accomplished in the treatment of acute Hydrocephalus

A. Subdue the inflammation on which the effusion depends.

Q. Would your treatment be the same in this as in Meningitis or Cerebritis without so great an effusion.

A. Yes Sir

Q. Is this not another form of Hydrocephalus?

A. Yes Sir.

Q. What is it called

A. Chronic Hydrocephalus which is supposed to have the same relation to meningitis as hydrothorax has to pleuritis.

Q. What are the most characteristic symptoms of chronic Hydrocephalus.

A. An accumulation of serous fluid in the ventricles or arachnoid causing an enlargement of the head. & a separation of the cranial bones by opening the sutures.

Q. Would you think pouring a stream of cold water an appropriate remedy for chronic Hydrocephalus

A. Yes Sir

Q. Does softening of the Brain ever occur without inflammation

A. It is probable it does in old persons with an ossification of the Arteries.

Q. How the appearance of a softened brain

differ ~~in differ~~ in different persons under different circumstances.

Q. Yes Sir. The color differs from a dark red to a milky white.

Q. Is the deep color generally observed in cases which have terminated early or late?

A. Early but is greater in the Effeminate portion.

Q. Upon what does the white color depend.

A. Upon age.

Q. When the ^{brain} is softened if it be cut through how does it differ from the natural Brain.

A. It will not present a smooth polished surface, but will be rough & ragged.

Q. Does softening of the Brain occur more frequently in young or old persons.

A. In old persons.

Q. By what symptoms is the acute or inflammatory softening of the brain denoted.

A. A severe dull heavy pain, depending on a termination of blood to the circumscribed portion.

Q. What is the Treatment?

A. Antiphlogistic.

Q. Is apoplexy an inflammatory disease of the Brain.

A. It is not.

Q. Is the Pathology of Apoplexy well understood.

A. Yes Sir.

Q. How is apoplexy divided.

A. Cerebral & haemorrhagic.

Q. What are the symptoms of Cerebral Plethora or those indicating an attack of Plethora apoplexy.

A. A sense of weight in the head. A dull & deep. Seated pain, vertigo, paper vision, Sparks & flashes appear before the eye. ringing in the ears. Hearing obtuse. Face flushed with a spasmodic contraction of the muscles in ~~the face~~ or tingling numbness in the limbs; excepting drowsiness or wakefulness.

D. What time are the symptoms which denote a determination to the head apt to occur in Females?

A. At time of Labor. They almost invariably precede what is called Convulsions (puerperal)

E. What is the treatment of or relieving this state of the system occurring under any Circumstances?

A. Copious Bleeding. Particularly when it occurs during Parturition. In old & feeble persons these symptoms are ^{relieved} by purgatives & cathartics.

F. How would you define Apoplexy? 12 Jan

A. A sudden loss of the power of voluntary motion & sensation with the functions of organic life much changed.

G. Does congestive apoplexy ever occur and only without the precursory symptoms that have been mentioned?

A. No Sir

H. What are the most prominent symptoms?

A. The pulse dilate. & cannot be made to contract. the skin is insensible. there will be general or partial Paralysis. Entire loss of speech. Respiration laborious. pulse very slow & full. Sensation intermittent. the temperature of the skin not altered. Frequently nausea & vomiting

Q. May the symptoms all disappear and the patient be entirely restored to health.

A. Yes Sir, as is frequently the case in a proportion after they have continued from one to six hours.

Q. When the cases tends to a fatal termination what generally proceeds to death.

A. Coma & continued convulsions.

Q. May not a person suffer frequent attacks of congestive apoplexy without any appreciable organic change.

A. Yes Sir, but there will generally be disorder in the intellectual & moral faculties.

Q. Is not congestive apoplexy frequently complicated with inflammation of the Brain.

A. Inflammation frequently occurs as a sequel of Congestive Apoplexy.

Q. What is observed when the contents of the cranium of patients dead of Congestive Apoplexy are examined.

A. The sinuses and membranes are congested with blood, in the substance of the Brain are numerous bloody spots, but the blood has not escaped from the vessels, there is generally an increased quantity of serum in the ventricles.

Q. Does there naturally exist much serum in the ventricles.

A. About a Table spoonful.

Q. What is the treatment of Congestive Apoplexy.

A. Copious Venesection, Arteriotomy. Cups Leeches Stimulating Cathartics & purgatives Hot pediluvium.

Q. What varieties of haemorrhagic apoplexy are there?

Q. 3. which were first founded on the degree of the symptoms and now are confirmed by anatomical changes observed by dissection.

Q. ~~What~~ What are the symptoms of the first or most vital ~~epique~~ ^{epique} which have manifested in animal life?

A. The patient is generally seized suddenly & falls prostrate. All sensibility, ~~he~~ is lost. The organs of sense cannot by any means be excited to action. The strongest light will not cause the pupil to contract, nor will the loudest voice make any impression on the auditory nerve. Motion is completely lost.

Q. Are the functions of organic life modified?

A. Yes Sir

Q. What is the Character of the Respiration?

A. Stertorous laborious. The lips protruded

Q. What is the Character of the Pulse?

A. Slow full laboring. ~~expressed~~ sometimes intermittent

Q. Is the Face usually injected & flushed?

A. Generally.

Q. Is there usually efforts to vomit?

A. Yes Sir

Q. What of Saliva & urine?

A. They are frequently discharged involuntarily

Q. Are the limbs in a rigid state?

A. No. They are flaccid obeying the laws of Gravitation

Q. Are the mental faculties destroyed for the time?

A. Yes Sir.

Q. Is the paralysis sometimes partial.

A. Yes Sir.

Q. The face & lips are sometimes palled & the pulse weak. what does this indicate?

A. A great effusion of blood in the cranium.

Q. What is examined the contents of the Cranium in this variety is observed?

A. A quantity of blood in the ventricles & on the surface of the brain ~~exists~~ sometimes, but the most frequent occurrence is the deposition of blood in the substance of the Brain, which exists in irregular Cavities the margins of which are ragged having portions of the cerebral substance detached. that portion near the cavity has a bruised appearance.

Q. Are the lesions sometimes confined to one Hemisphere.

A. Yes Sir. then hemiplegia of the opposite obtains.

Q. What are symptoms of the second variety?

A. The subject falls in a state of Coma either with or without precursory symptoms. This Coma may precede or succeed paralysis, the face is distorted, there is sometimes but not always an entire loss of sensibility.

Q. If there should be paralysis of the left side to which side would the tongue incline when the patient attempted to protrude it?

A. It would turn to the left?

Q. May the pupils be made to contract by a strong light?

A. Yes Sir.

Q. Suppose there be Coma, but not profound and then hemiplegia, will sensibility be destroyed?

ed. on the affected side?

B. It will be manifested on the other side

Q. Do all the unpleasant effects of an attack of this variety of apoplexy go off when the patient recovers his health?

A. No Sir. The voluntary muscles particularly those of the tongue & hand never regain their former action & there is generally a deficiency in the intellectual faculties.

Q. What are the Anatomical changes that occur in the Cranium of those who die of this variety of apoplexy?

A. The vessels of the brain & membranes are congested & there is generally an extravasation of blood in the Centre of one or both Hemispheres if recent it is soft & attached the cerebral substance.

Q. Suppose a patient while recovering from an attack of this variety should be seized with the action of some accidental cause which would prove fatal what alteration would you find to have taken place in the extravasated blood?

A. It will be found to have diminished in quantity, turned yellow, & enclosed in a cyst or sac, & surrounded by serum.

Q. What are the symptoms of the third variety?

A. In this the person is not stricken down per se but he feels a sense of fulness of head vertigo, a confused mind, numbness in the fingers & lips, &c

Q. Do these symptoms sometimes disappear
 even without treatment?

A. Yes Sir

Q. Does an attack predispose to another?

A. Yes Sir

Q. What changes are observed by dissection

A. A small quantity of blood extravasated in one
 hemisphere of the brain. There is generally but
 little injury done to the substance of the brain

Q. Name some of the causes of Apoplexy?

A. Excessive heat. Excessive cold. Intemperance of all
 living &c

Q. Are the stout thick short necked & robust
 Constitutionally predisposed to Apoplexy?

A. No Sir. It is a vulgar error. The lean are
 more frequently attacked

Q. Give the treatment for hemorrhagic Apoplexy

A. Bleeding. Cups, Leeches Hot foot bath, Stimu-
 lating cathartics Cold water poured on the head

Q. Name a very important means of producing
 revulsion which is but little used?

A. Application of the Tourniquette to the extremities

Q. In what disorder is this remedy most used?

A. During the cold stage of intermittent fever

Q. How is it to be applied when the object is to
 produce Revulsion in the limbs?

A. It is to be applied near the body & sufficiently
 by tight to arrest the flow of blood through the
 veins but not through the Arteries

Q. Does the Tourniquette act upon the same prin-
 ciple as Sinapisms. Cups & Hot Pedicure?

A. Precisely

3. What change occurs in the lint, to which has been applied?

A. It turns red, & becomes swollen.

Q. In what way will retaining the blood in the extremities prove beneficial in inflammation or congestion of the vital organs?

A. It diminishes the quantity of blood in the circulation. It produces congestion in organs of less importance which diverts the blood from vital organs, & embolus thus formed, as phlebitis.

Q. Do you think this would be a good remedy in Cholera?

A. Yes Sir.

Q. What other affections did he mention in which this remedy would prove of great utility?

A. Apoplexy. Haemorrhages particularly uterine?

Q. When uterine haemorrhage is to a great degree so as to prostrate the patient, & yet continuing, how would you apply the Tourniquet?

A. So as to arrest the flow of blood through the arteries, & by this means keep up the action of the heart, & relieve syncope.

Q. There were some affections mentioned, which were not regarded as being accompanied with symptoms sufficiently uniform & regular to enable you to distinguish with certainty one from the other; what were they?

A. Cancer, Fungus, & Melanodes, & many Tumors. However Cancer of the brain may be distinguished because the Cancerous diathesis will be present.

Q. Is paralysis anythink more than a

Symptom of Disease?

B. No Sir. It is no more a disease than Diarrhea.
 Q. How do you now think of an affection of the
 paralytic? A. An incurable one.
 Q. It probably seldom does.

Q. When the paralysis is general upon what do
 you suppose it depends?

A. Upon a Compression or change in both
 hemispheres of the Brain.

Q. What may Cause Compression?

A. An effusion of blood, serum. or pus. a great
 degree of congestion of the vessels. or dispre-
 sion of the bone.

Q. What is that form of paralysis called when
 sensibility of half the body taken longitudinal-
 ly is lost?

A. Hemiplegia.

Q. What when taken transversely?

A. Paraplegia.

Q. Will injuries of the spine produce paralysis?

A. Yes Sir.

Q. What is that variety of delirium called
 which is produced by the use of Alcohol?

A. Mania a potu. or Delirium Tremens.

Q. What are the symptoms?

A. Commences with watchfulness Tremor
 of the muscles. Agitation throughout all the
 limbs. Great impatience. Fears approach-
 ing danger. Commonly imagines devils
 are about him. These symptoms increase
 the patient might without sleeping.

Q. How is Perception? A. False

Q. How is the Patient's reason?

A. Probably natural. 16 Jan '44.

Q. Does disorder occur in the functions of organic life?

A. Yes. There will be nausea & vomiting, the tongue furred white, the pulse generally moderately full & strong. Sometimes rapid: the skin cold & covered with clammy perspiration.

Q. When the disease terminates fatally what precedes death?

A. Coma. Sometimes Convulsions.

Q. Does it generally prove fatal.

A. No Sir.

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Q. Would you use Emetics treating a case of delirium Tremens.

A. They may sometimes be used beneficially.

Q. What is Dr. Klapp's pathology?

A. A state of torpor insensibility, & chronic irritation or morbid excitement of the Stomach.

Q. Is it known positively what is the pathology of Delirium Tremens?

A. No Sir. It is believed to be an affection of the Brain.

Q. What do you think of bleeding in this disease?

A. It is not an appropriate remedy.

Q. Would you use Cathartics.

A. Yes Sir. Calomel. doses of 15 or 20 grs.

Q. Upon what two Remedies is most reliance placed in treating this disease?

A. Cold water & Opium.

- Q. Why would you use the cold bath.
- A. Experience has shown its great utility notwithstanding the surface is cold & bedewed with perspiration.
- Q. Is Opium sometimes used freely?
- A. Yes Sir. The quantity is to be determined by the effects produced.
- Q. By a combination with what medicine is effect improved?
- A. Camphor. & Red pepper. Give Cam, or R.P. & Opium 2 grs each.
- Q. What other antispasmodics are recommended in this affection?
- A. Valerian. Asfoetida. Musk &c
- Q. What is the appropriate moral treatment?
- A. He should be treated soothingly. Coercive measures should not be used to confine him. He should not be positively contradicted.
- Q. Define Epilepsy?
- A. A more suspension of the senses, with convulsions & frothing from the mouth, terminating in sleep. occurring at intervals.
- Q. Is there great regularity as respects the occurrence of Epileptic Paroxysms.
- A. Sometimes Sir. It frequently occurs in females at the menstrual period. Sometimes the interval is much shorter. Sometimes longer.
- Q. After the first paroxysm is there a great tendency to the occurrence of another?
- A. Yes Sir.
- Q. Where is the primary affection seated?
- A. In the Brain or Spinal Column.



2. What is found by dissection

A. If the patient dies during the paroxysm, the vessels of the brain are congested but if in the interval there are no physical changes uniformly found.

3. Does the attack sometimes come on suddenly without any premonition.

A. Yes Sir.

4. What generally precedes an attack.

A. Pain in the head, vertigo, & dimness of vision a peculiar sensation of itchy some part of the body as a finger, a toe, the nose &c. which all may progress towards the Centre of the System. This is termed aura Epileptica.

A disturbance in the intellectual faculties

5. What are the symptoms during an attack or paroxysm?

A. The patient falls down in a state of insensibility and immediately becomes convulsed, the mouth is open, the tongue protruded with much asphragm of breath. As the convulsions subside the patient falls into a deep sleep with stertorous breathing from which he wakes comparatively well.

6. Do a great many of the Epileptic fits occur in a short time?

A. A case was mentioned in which 30 occurred in 24 hours.

7. To what disease does this predispose?

A. Apoplexy.

8. How is the treatment divided?

A. Into remedies used during the attack & those during the interval.

- Q. What would be the treatment during the paroxysm?
- A. If the patient be predisposed to & subject to frequent attacks you should do nothing more than prevent the patient from injuring himself.
- Q. Name some remedies used to prevent & arrest of an apoplectic fit.
- A. The Flax of Linn. Luna Caustic, Electricity, Bleeding, Bloodletting & Co. fixum, &c.
- Q. Upon what remedies would you place the most confidence?
- A. Vermifuge Remedies & Quinine. The latter should be given in large doses. commencing sometimes previous to the Epileptic fit.
- Q. By other name is Core generally known?
- A. St. Vitus' Dance.
- Q. Who are most frequently attacked with it?
- A. Persons under the age of Puberty & oftentimes females than males.
- Q. What kind of disease is it?
- A. Nervous. Characterized by a continual motion of some part of the body. the intellect is not impaired.
- Q. In what part of the nervous system is the disease probably situated?
- A. Spinal Marrow.
- Q. What are the Exciting Causes?
- A. Violent passions, masturbation & it is frequently produced by sympathy. or from a principle of imitation. And other Causes.
- Q. Is the disease sometimes cured spontaneously?
- A. Yes.

A. Yes Sir.

B. How the symptons of this disease?

C. After a manifestation of bad health for some time there occurs spasmodic action in the muscles at first slight, but they become more violent until almost every voluntary muscle is in a state of involuntary action. When the patient attempts to walk his legs are irregularly abducted & adducted involuntarily.

C. Does this disease ever occur in pregnant females?

C. It does, particularly in those who had ^{it} before they reached puberty.

C. Are they generally relieved by delivery?

A. They are. But are left predisposed to other nervous affections.

B. What is the Treatment of Cona.?

A. Remove if practicable the exciting Cause use mild tonics; the cold bath; the cold Sulphur bath. the most important remedies are Opesitations to the Spine.

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B. How are diseases of the chest divided?

C. First diseases of the Lungs & Heart. 2. Diseases of the appendages of the Lungs.

C. Is the diagnosis of the diseases of the chest generally more easily & correctly obtained than the diagnoses of the diseases of the Throat.

A. Yes Sir. because in affections of the chest perusal observation is practicable.

C. Can ^{you} distinguish diseases of the abdomen with certainty for the same reason?

A. Yes Sir. There the sense of touch is principally up-

Employed

2. Is it not for the same reason that the innumerable diseases of the cutaneous surface can be so readily & correctly distinguished?

A. Yes Sir by the sense of vision, the experienced are able to ~~diagnose~~ ^{diagnose} diseases of the skin with great accuracy & distinguish those between which there exists but very little difference.

Q. When you employ the sense of Audition in determining the diseases of the chest what is it called?

A. Auscultation.

Q. What is the difference between sign & symptom?

A. Signs are symptoms evaluated & interpreted.

Q. Have Auscultation & percussion aided much in diagnosing disease of the Lung & Heart?

A. They have brought the diagnosis of those diseases to a state of perfection almost.

Q. What does this fact suggest to us in regard to the study of medicine?

A. That it should be studied as a physical science that we should cease to talk of the vital principles &c, it being beyond ~~the~~ a scientific consideration.

Q. What is auscultation?

A. The art of hearing or catching those audible sounds which exist within the Thorax while the organs are carrying on their functions.

2. Who of the profession say that auscultation is of no importance?

A. Those who object to any innovation in the science. Those who have neither studied nor practiced

3. How is auscultation divided?

A. Into Mediate & immediate ~~for auscultation~~.

3. What is meant by immediate?

A. When the ear is applied directly to the parietes of the Thorax.

3. Through the medium of what instrument is mediate auscultation generally practised?

A. The Stethoscope

When would you use the Stethoscope?

A. In examining circumscribed parts parts to which the ear cannot be applied as the axilla, & in examining females

3. Upon what is auscultation founded?

A. Upon the fact that the thorax in the thorax is alternately diminishing & enlarging & yield certain audible sounds.

3. Are the Lungs active in this dilatation?

A. No Sir. by an enlargement of the Thorax a tendency to form a vacuum occurs which causes the air to rush in through the air tubes with considerable momentum.

3. Is it necessary to learn the health sound first?

A. The must be the standard by which morbid sounds are learned.

3. In health can more than one sound be heard by applying your head to different parts of the chest.

A. No Sir. Two.

3. What are they called.

A. The Blowing, or Roruchial, & the Respiratory or Vesicular murmur.

3. How is the loud blowing sound produced?

Q. By the air passing through the large Tubes.
 Q. When is it heard most distinctly?

A. In the interscapular space, immediately below the Clavicles.

Q. How is the respiratory murmur produced?

A. By the air impinging with some considerable force on the particles of the air vesicles.

Q. Where can this be heard most distinctly?

A. At the Anterior middle part of the chest.

Q. In whom is this sound heard most

A. In Children

Q. On which side of the median line is the bronchial?

A. On the right because the tube on that side is largest.

Q. Is the exact situation of the Lungs accurately delineated by the bony walls of the Thorax?
 A. No Sir. They extend above the superior margin but do not reach the inferior margin particularly the anterior & middle parts of the Base of the Lungs.

Q. Tell us how you would draw a line around the body to indicate the Attachments of the Diaphragm.

A. Commence at the inferior extremity of the Sternum, or the Anterior extremity of the 7th rib, running obliquely back wards & down wards & terminating at the posterior extremity of the 11th rib.

Q. What occupies the lower Thorax in the right lower part?

A. The Liver

Q. What is generally the size of the space

to the left of the median line anteriorly & between the 5th & 6th ribs at which these sounds may not be heard.²

A. About 3 inches square. Sometimes more at other less. And when the lungs cover the heart anteriorly no such exists.

Q. What variation, in these sounds mark the most simple departure from the natural state.

A. An increase, diminution or abolition.

Q. Do the sounds vary in degree in different individuals in health?

A. Yes Sir.

Q. How would you know whether to regard these variations as indication of disease or a peculiarity of the individual?

A. If the increase or diminution existed in every part of both lungs, then it is to be regarded as a peculiarity; but if it is in one lung only or a part of one lung then it is a mark of disease.

Q. I suppose the respiratory murmur is absent in the upper portion of the right lung, but increased in the lower & the whole of the other what would be the conclusion?

A. That the upper portion of the right lung is diseased, perhaps by the existence of crude tubercles there, the portion of this lung and the other lung are healthy but increased in action.

Q. When the respiratory murmur is increased what is it called?

A. Purley Respiration.

Q. Suppose there is an absence of the respiratory murmur in the left lung & the purley Respi-

noting in the right what be the condition of the case
 Q. The pleura on the left would be filled with
 serum from pleurisy.

Q. When the bronchial sound is increased but not to
 such an extent, but that you can hear the respira-
 tory murmur, what is it called?

Q. Rude or rough bronchial respiration This is ob-
 served in most diseases of the lungs when com-
 mencing.

Q. What is meant by the Tubal sound?

Q. A bronchial sound louder & shriller than the Rude
 It is like the sound heard by applying the ear to a me-
 tallic tube while a current of air is passing through it.

Q. What causes it?

Q. The membranes lining the bronchial tubes is con-
 densed & indurated. so also are the tissues of the lungs
 congested or condensed surrounding the bronchial tubes.

Q. In what disease is the Tubal sound almost always
 present?

Q. Pneumonia.

Q. Can the respiratory murmur be heard where the
 Tubal sound exists?

Q. No Sir.

Q. What is meant by the Cavernous Sound?

Q. A. Coarse, loud, resonating sound.

Q. How is it produced?

Q. By the air passing from a large bronchial
 tube into a dry cavity formed in the lungs perhaps
 by Tubercular Phtisis.

Q. Are there not some other varieties of increased or
 diminished sound?

Q. Yes Sir.

- Q. What is meant by Roushus or rattling sound?
- A. The sound produced by the air passing over or through moist fluids in the pulmonary passages.
- Q. How is this sound divided?
- A. Dry & moist
- Q. What do you understand by dry Roushus?
- A. When the fluid such as mucus just is in the bronchial tube is so consistent that the air does not enter it but passes by or over it giving it a vibratory motion.
- Q. How is dry Roushus divided?
- A. Sonorous & sibilous or hissing sounds
- Q. How may the sonorous sound be made to disappear?
- A. By coughing or forcible expectoration
- Q. Where is this sound generally heard most distinctly?
- A. At places near the roots of the Lung.
- Q. Does the sibilant sound frequently exist?
- A. Yes Sir, sometimes in the whole of both lungs.
- Q. May it be heard during inspiration & expiration?
- A. Yes Sir, often the expiration is finished.
- Q. Where is it produced?
- A. On the small tubes.
- Q. In what disease it uniformly presents?
- A. Acute bronchitis.
- February 1. 42.
- Q. Are there varieties of the moist Roushus?
- A. They differ in regard to the degree or intensity of the sound. & How has it divided?
- Q. What is the greatest or loudest sound called?
- A. The Subal. gurgling crepitation or sonorous Roushus.
- Q. How is it produced?

Q. By air passing through a large bronchial tube into a cavity in the lung containing fluid it is by the air escaping from the fluid in large bubbles.

Q. Where is the sound most frequently heard?

A. At the apex of the lung, the cavity being formed by the relaxation of tubercles, the pus is the fluid.

Q. What is the next sound called?

A. Tracheal roushus, called also The Rattle.

Q. What kind of a sound is it.

A. A large rattling sound, generally present in approaching death, - produced in the Trachea.

Q. What sound next in degree to the Tracheal?

A. Mucous bronchial roushus.

Q. On what disease is frequently heard?

A. Pneumonia, formed in the large bronchial tubes.

Q. What is the next smaller called

A. Bronchial Crispitation.

Q. What is the last.

Dr. Ford

A. Small Crispitation or Crispitant Roushus.

Q. When is it formed?

A. In the vesicular structure.

Q. What does it most resemble?

A. The crackling of salt on fire, or the sound of the ^{air} escaping from boiling fat.

Q. Can the Crispitant roushus be made to disappear by an expectorant effort of the patient?

A. No Sir.

Q. In what disease is almost uniformly present?

A. Pneumonia.

Q. Is it heard during inspiration?

Q. As Sir.

Q. What is that sound called which is heard by placing the ear near the Trachea or large bronchi while the person is speaking, the sound being increased?

A. Bronchophony.

Q. When Bronchophony is complete can you hear the vesicular murmur

A. No Sir the vesicles are impermeable

Q. What is Pectoriloquy?

A. A speaking from the chest, that is if you apply your ear to the chest while the person is speaking the voice seems to come from the lungs.

Q. What is necessary to the existence of Pectoriloquy

A. A cavity of some size in the lungs, such as a pneumonia & that there should be in it no fluid.

Q. Does it frequently occur

A. Seldom.

Q. Is it important in performing auscultation that the observer should have any easy position?

A. It is. They the examination may be prolonged, the observer should on the side that he is examining.

Q. What position is best for the patient?

A. The Erect, but his convenience & comfort must always be regarded.

Q. Is it necessary to examine various parts of the Chest, & similar parts in rapid succession.

Q. What is Percussion?

A. A modification of auscultation. It is the striking or communication of an impulse to the body by which to judge of the density.

Q. What is the art of Percussion called.

Q. When do you take the pulse of different districts with the Perussion yield different sounds?

Q. In what ways is Percussion performed?

A. Mediate and immediate.

Q. Why is mediate preferable?

A. Immediate is painful.

Q. What is generally used as an intervening body, in which to strike?

A. A percussion plate.

Q. Is it necessary that the plate should be accurately applied to the surface?

A. It is.

Q. If the percussion is to be made on an uneven surface what would you use instead of the plate?

A. The fore finger of the left hand.

Q. With what would you strike?

A. The end of the middle finger. The nail should not touch the plate, or its substitute when one is used.

Q. When the finger is used as a Perimeter upon which phalanx do you strike?

A. The middle.

Q. There were two sounds mentioned as extremes of those heard, by percussion what are they called?

A. One clear & resonating, the other dull & insonorous.

Q. Over what organ will the clear & resonating sound be heard, when percussed?

A. The stomach when it contains no food.

Q. What next to the stomach?

A. The intestines.

Q. What next the intestines?

A. The Lungs, then the heart, then the Liver muscles and bones.

Q. Can the situation of the Liver be marked by Percussion?

A. It can be done by one who is experienced with great accuracy.

Q. By Percussion then you may know distly if any organ increases or diminishes in size?

A. Yes Sir.

Q. To ascertain the condition of the Apex of the Lungs where would make percussion?

A. Above the Clavicle.

Q. Name some other purposes for ^{which} auscultation may be used beside diagnosing diseases of the chest?

A. To disease of the abdominal viscera, the Perian, fractured bones, by it you hear the pulsation of the Portal Heart.

Q. Is Pleurisy & Phlegmesia?

A. Yes Sir. it is a local inflammation attended with Effusion.

Q. It is an inflammation of what?

A. The Pleura.

Q. What Term would be more in accordance with the nomenclature?

A. Pleuritis.

Q. What was said of the mode in which Pleuritis would be treated of. as relates to the diseases of other serous membranes?

A. The anatomical changes, the character & treatment of Pleurisy would be taken as a model for inflammations of all serous tissues.

Q. Can the circumstances attending Pleuritis be made strictly to apply to all inflammations

of all serous membranes?

A. With the exception of location & function of parts in its vicinity.

Q. Are the physical changes which occur in Pleuritis well understood?

A. They are.

Q. Is the pleura generally red in cases dead of pleurisy?

A. It has the appearance generally of being red but excepting extremely violent cases the redness is always dependant upon the injected vessels of the sub-pleuritic tissue.

Q. Is the pleura found ulcerated?

A. Very rarely.

Q. Is the secretion from the pleura always increased?

A. It is. The quantity varying with degree of inflammation.

Q. In what direction are the lungs generally compressed by this fluid?

A. Towards the vertebral Column.

Q. Are they not sometimes pressed against the anterior & lateral parts of the chest?

A. They are. when adhesions exist at those parts which are the result of previous inflammation.

Q. Are there some changes in the chest which are the consequences of the increased secretion from the pleura which may be discovered during the life of the patient?

A. The diaphragm is depressed which causes the liver to descend below the margin of the thorax the ribs are more widely separated.

and the intercostal space is more prominent.

Q. Does the fluid ~~vary~~ secreted by the pleura vary in ^{kind} ~~quality~~ as well as quantity?

A. Yes Sir. It is sometimes lumped. Sometimes turbid & flocculent - purulent - membranous

Q. What are the causes of pleurisy?

A. External violence, as blows, falls, or burns on the chest. Vicissitudes of atmospheric temperature, moisture. One attacks friends & another. It often exists with pneumonia & phthisis pulmonalis

Q. What is the most characteristic pain of pleurisy?

A. Stab

Q. Are the pains either precede or succeed the other symptoms in the commencement?

A. Yes Sir.

Q. Is the part in which the ^{pain} exists circumscribed?

A. Yes Sir. It generally exists only in side but sometimes in both

Q. What is the character of the pain?

A. Violent cutting pungent, increased by the motions of the thorax, by percussion, pressure, agitation &c.

Q. Is there generally inability to lie on one side?

A. Often the patient cannot lie on the side affected

Q. Does pain always exist?

A. No Sir. There have been fatal cases & other symptoms never occurred.

Q. Is not pain resembling the pain of pleuritis

sometimes present when there is no inflammation of the pleura.

A. Yes in pleuralgia.

Q. How may the pain of pleuralgia be distinguished from pleurisy?

A. In pleuralgia the pain is intermittent, in pleurisy it is continuous, there is no abatement by immediate means or until the disease has run its course. If a sinapism be applied to the dorsal vertebral pleuralgia will be relieved, but pleurisy will not.

Q. Does not there occur a very great increase of pain sometimes without any appreciable cause?

A. Yes Sir, which fact should be remembered in forming the prognosis.

Q. What is the character of the respiration?

A. It is difficult, the patient seems afraid to fully dilate the chest, therefore the inspirations are short & imperfect.

Q. There is some fluctuation in the respiration with respect to the portion of the pleura inflamed what is it?

A. Sometimes respiration is performed almost entirely by the diaphragm & abdominal muscles & is called abdominal respiration, then again the diaphragm remains steady & respiration is performed by the alternate increase & diminution of the horizontal diameter of the chest & is called Thoracic respiration.

Q. What is inflamed when abdominal respiration exists?

A. The costal or Pulmonic Pleura.

2. When Thoracic respiration what portion of the Pleura is affected?

A. Diaphragmatica pleura.

2. What is the Character of the Cough?

B. A short suppressed hacking cough. it is performed without taking a full inspiration

3. What change takes place towards the termination of the disease?

Q. It becomes loose & is accompanied with the expectoration of mucus?

3. Is not cough sometimes absent?

A. It is, ~~Alone~~ it cannot be considered diagnostic

Q. Does there not sometimes occur an appreciable deformity in the contour of the Chest?

Q. Is sin its consequence of the effused blood, in this

2. How would you ascertain if there be an enlargement of the lide?

C. By measuring from a median line anteriorly to one posteriorly both sides of the Chest.

Q. What other changes occur in the parities of the Chest that may be easily discovered?

c. The ribs are elevated, & more separated. The intercostal muscles are salient

2. Can you hear anything by shaking the chest of the patient?

A. gurgling sound will be produced.

Q. Is not the position of the shoulder frequently changed?

Q. There is a perceptible elevation

3. Does permanent deformity result ever from
placidity?

As is the when the effused fluid keeps the

lung compressed for some times. the air cells become obliterated by adhesions & when the fluid is absorbed depressions of the parietes of the chest occurs

Q. Can you ascertain the quantity of fluid in the chest by Percussion.

A. Yes Sir. by examining the patient in an erect position you can ascertain how thick the fluid extends

Q. What is the character of the respiratory murmur in pleuritis?

A. It is diminished in the part affected but increased in the healthy when there is permanent depression on one side there is finite respiration in the healthy lung.

Q. What are some of the general symptoms of pleurisy?

A. The pulse is full strong & hard. Headache. Stiffness of the neck. All secretions are suppressed or diminished. tongue furred white which becomes brown. sometimes moist sometimes dry.

Q. Does some effusion occur in all cases?

A. Yes Sir.

Q. Does it generally disappear with the other symptoms?

A. Yes Sir.

Q. How long is pleurisy generally running its course?

A. From 7 to 10 days

Q. Does it frequently terminate by increased secretion from some of the respiratory organs?

A. Yes Sir.

Q. What is the prognosis

A. Generally favorable.

Q. Would you practice bloodletting in pleuritis

A. Certainly.

Q. How would you bleed?

A. Place the patient in the erect position, & permit the blood to flow till she is relieved, repeat the operation if the pain returns.

Q. In a case of pleuritis when there is no pain would bleed?

A. No Sir till a tendency to syncope supervenes.

Q. Is local bleeding of much importance in Pleuritis

A. Yes Sir.

Q. Are Emetics serviceable

A. They are. After one copious bleeding gives an active Emetic Cathartic. it generally will cut short the disease. If the patient be not relieved by this method the use of Tartar Emetic in doses of $\frac{1}{8}$ gr every hour.

Q. Would apply a blister to the Chest if the pain continued?

A. Yes Sir. They are in no case more valuable than in inflammation of the serous membranes after depletion.

Q. What is Pneumonia?

A. An inflammatory affection of the lung &c. located in the interstitial cellular structure & in the mucous membrane of the vessels.

Q. How many grades of Pneumonia are there?

A. Three founded on anatomical changes but only two can be distinguished by auscultation & percussion.

Q. What are these different grades called?

A. 1. Simple. 2. Red Hepatization 3 White Hepatization.

Q. What is the Condition of the Lungs when examined after death in simple Pneumonia?

A. They are softer when pressed between the fingers crepitation though small is manifest. They sink in water, are of a brown-vermillion color, when cut a mixture of blood & foaming mucus is perceived in the vesicular structures.

Q. What is the condition of the Lungs in red hepatization

A. They are of a deep red colour. Because charged with blood, much heavier & softer, no crepitation, moderate pressure destroys the structure, when cut no bubbles of air are seen escaping.

Q. What is the condition of the Lungs in the white.

A. Of an ash color, which depends upon the existence of pus in the vessels. Are soft & heavy.

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Q. Is not the pus in gray hepatization some times collected in abscesses?

A. Yes but continued Gangrene occurs.

Q. Do patients ever recover after partial Gangrene in the Lungs?

A. Sometimes.

Q. What part of the lungs is most frequently affected with pneumonia?

A. The lower lobe, it being unlike pulmonary Consumption which affects the upper portions.

Q. May Pneumonia be simple or double?

A. It may be in one or both lungs.

Q. During what season does Pneumonia most frequently occur

A. Winter.

Q. Does it frequently occur during the existence of other diseases?

A. Yes Sir. With fevers. *Phthisis Pulmonalis*

Q. Are persons of all ages liable to it?

A. Yes Sir. but most common in middle age.

Q. When does Pneumonia generally Commence?

A. With a chill followed by fever. Sometimes however an attack of Pneumonia is insidious in its commencement being preceded by common catarrh

Q. What is the Character of the pain of Pneumonia

A. An obscure dull heavy pain it is more general. not circumscribed as in pleuritis, nor is there an increase of the pain by motion, by pressure slow or by ordinary respiration to near so great an extent as in Pleuritis.

Q. But is not the pain sometimes pungent?

A. Yes Sir. it is an evidence that the pleura is also affected.

Q. What is the character of the respiration?

A. It is interrupted. there is great oppression in the Chest. the patient seems to feel the want of vital air. makes frequent efforts to procure full inspirations. which more rapid & hurried than natural.

Q. What is the character of the Cough?

A. It is generally more frequent than in pleuritis but may be called oppressed.

Q. Is the Cough incessantly present?

A. It is very rarely absent.

Q. Is it accompanied with expectoration

A. At the commencement the Cough is dry, but in two or three days matter consisting of blood

& mucous intimately mixed & varying from a brick dust to a deep, vermilion color, is expectorated?

Q. How would you distinguish the expectoration of Pneumonia from that of Catarrh?

A. In Catarrh the blood & mucous are not intimately mixed, but is stratified.

Q. Is the matter expectorated in Pneumonia very viscid?

A. It is. It is with difficulty the patient can free his tongue & mouth from it, the tenacity of the matter expectorated is in direct ratio with the intensity of the inflammation.

Q. As a case of Pneumonia advances to a fatal termination is the expectoration increased or diminished?

A. It is diminished. Either because the patient is too weak to bring it up when secreted or the the vascular structure is so congested that there is no secretion.

Q. What is the character of the expectoration when a case progresses towards a favorable termination?

A. It becomes less viscid, the color is less deep, & resembles in all respects matter expectorated in chronic bronchitis.

Q. What position is generally assumed by the patient?

A. On the back or affected side with the head elevated.

Q. What can you learn by Percussion in Pneumonia?

A. A dullness of sound over the diseased part which may be distinguished from that of Pleuritis by examining the patient in the erect & horizontal position.

Q. What can you learn by Auscultation?

A. It discovers early in the disease the Crispitant Roushus. which depends upon the air mixing with the bloody mucous in the vesicles. Tubular respiration & Bronchophony are also present.

Q. Are these sounds heard in Lobarized pneumonia as well as Simple?

A. In the red & gray the Crispitating roushus can not be heard. because the air vesicles are so congested the air cannot enter them, therefore the vesicular murmur cannot be heard; The tubular & Bronchophony are more distinct than in Simple.

Q. In the red or gray, if the whole lung be not diseased. Can you not hear the Crispitating roushus in some part of it?

A. Yes it may be heard at the line that separates Healthy from the diseased part.

Q. In the suppurative of ~~acute~~ Pneumonia during the course of other diseases Can you not ascertain the fact by auscultation before the ordinary symptoms make them apparent.

A. Yes Sir.

Q. Is Pneumonia always accompanied with Fever?

A. Yes Sir the pulse is uniformly full & frequent not generally tense. the tongue at first furred white which becomes brown. there is generally a livid flush one or both cheeks, which is supposed by some to indicate which lung is affected.

Q. Are the Functions of the stomach disturbed?

A. Not necessarily, but sometimes it is the case particularly in what is called Pneumonia biliosa.

- Q. What is the condition of the intellectual functions?
- A. There is dullness and confusion in their performance.
- Q. Would you bleed copiously in Pneumonia?
- A. At the first I would, but afterwards the quantity taken should be less.
- Q. In some cases there is great prostration & cold extremities would you bleed them?
- A. Yes Sir. In these cases auscultation will tell you of the existence of inflammation of the lungs.
- Q. Are Emetics serviceable in Pneumonia?
- A. Yes Sir. Tartar Emetic.
- Q. Would you keep the bowels open with laxatives?
- A. Yes Sir. Active Purgatives are not to be used.
- Q. What do you think of the Contra Stimulant plan of practice in pneumonia.
- A. I do not like it much.
- Q. What is the Contra Stimulant method?
- A. By commencing the use of Tartar Emetic in small doses & generally increase the quantity as the system tolerates it.
- Q. Is Calomel an important remedy in Pneumonia?
- A. In the bilious variety it is very important & it is not much less important in any form of P.
- Q. With what would you combine the Calomel?
- A. With minute portions of Speace or the golden sulphur of Antimony.
- Q. What do you think of blisters in Pneumonia?
- A. They are beneficial. but ^{not} so much so as in Pleuritis.
- Q. What is meant by the expectorant method of treating this disease?

Q. Give no medicine but merely ~~to~~ regulate the diet, air &c of the patients.

Q. Who found the disease as successfully treated in this as any other way?

A. Louis.

Q. You would rely upon it in treating this disease, would you?

A. No Sir such a method of treatment may be attended with success in Hospitals where the inmates have their constitutions broken down, but in this Country the antiphlogistic treatment is proper.

Q. You ^{you} have doubts as to the propriety of carrying depletion farther, is it not then proper to depend on the expectorant method?

A. Yes Sir.

Q. What is bronchitis?

A. Inflammation of the mucous membrane lining bronchial tubes.

Q. What are the changes that occur in this membrane in bronchitis?

A. Redness & tumefaction which may be confined to or spread over one or both bronchial ramifications. Sometimes a false membrane exists, generally the mucous membrane is covered with mucus & mixed with blood.

Q. What are the most common causes of bronchitis?

A. Variations in temperature & moisture of the atmosphere. It exists frequently during the course of the exanthematic diseases, it occurs both sporadically and endemically.

Q. What are the common symptoms?

A. The Cough is violent, it is effected by taking

in a deep inspiration, the coughing produces a constant headache. The cough is at first dry it is accompanied with a mucous expectoration varying in tendency & opacity with the degree of inflammation it is sometimes striated by mixture with blood. There is a sensation of heat & dryness felt in the ~~throat~~ trachea. the respiration is not generally much embarrassed.

Q. What will percussion give you?

A. Negative symptoms only. but they are valuable

Q. What can you learn by auscultation?

A. The rude respiration & sibilant roushus may be had the small crepitation generally present in Pneumonia is absent.

Q. What is generally the Character of the pulse?

A. Not much excited. more frequent than natural.

Q. Where is the pain in the head located?

A. In the frontal region or Sinus

Q. Is there frequent vomiting?

A. No in but it is sympathetic & not dependant on gastric disease.

Q. What is the prognosis?

A. In simple bronchitis. it is favorable generally

Q. When Bronchitis occurs in old & debilitated persons what is it then called?

A. Catarrhus Senilis. The termination of this not generally favorable.

Q. When bronchitis occurs endemically what is it called?

A. Influenza. This is not so manageable & favorable in its termination as simple sporadic cases. bronchitis occurring during longuiescence from protracted disease.

in Cholera or dysentery is a serious affection
 Hence the extreme value of succussion in these
 cases as the rattle rucus may be heard before
 the patient begins to cough.

Q. What is the treatment of bronchitis?

A. Emetics, Revulsives, Cathartics. Sometimes
 resection & Blesters are necessary.

Q. What is Haemoptysis?

A. An exudation of blood from the mucous
 membrane lining the air passages.

Q. Does it more frequently occur in early life?

A. It does.

Q. What are the symptoms which generally pre-
 cede the discharge of blood?

A. A feeling of heaviness & lassitude, pain in case
 and oppression in the chest.

Q. What is the appearance of the blood when
 brought up?

A. It is of florid color more or less intimately mix-
 ed with air, it may be distinguished from
 Haematemesis by the blood in the latter being co-
 agulated, of a dark red color & not mixed with
 air also by the manner in which it is brought
 up.

Q. What are the causes of Haemoptysis?

A. Atmospheric vicissitudes, inhalation of irrita-
 ting particles in the air, or erect along gas, crude
 articles of diet. Mechanical injuries. It frequently
 occurs as a nervous discharge. The most common
 cause is the existence of tubercles in the lungs.

Q. Is it said by some that Tubercles always ex-
 ist when Haemoptysis occurs?

Hoping Cough

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Q. Jones says so. Andral says not.

Q. At what time in the twenty four hours does haemoptysis most frequently occur?

A. Just before day light.

Q. What is the treatment of haemoptysis

A. Practice emulsion, keep the bowels open by saline cathartics, use opiates to quiet the depressed spirits, astringents combined with opiates or given alone & held just in the mouth, & retained there till it is dissolved, sometimes acts beneficially.

Q. Would you give sugar of lead & Dover's powders in combination?

A. Not without the nitrate Potasse to need instead of the Sulphate, in preparing the powders.

Q. If the patient becomes prostrated from the loss of blood what remedy would you then use?

A. Active revulsives to the skin.

Q. What is Pulmonary Apoplexy?

A. It is an effusion of blood in the interstitial structure of the lung which obliterates the air vessels embarrasses respiration & finally suffocates the patient.

Q. Would your treatment be in this as in haemoptysis

A. Yes Sir.

Q. Is it well known what is the pathology of Hoping Cough or pertussis?

A. No Sir. But it is most probable an inflammation of the pneumogastric nerve.

Q. How long is it in running its course?

A. Generally about 6 to 8 weeks.

Q. How does it generally commence?

136 *Phtisis Pulmonalis*

A. With symptoms of Bronchitis.

B. What is the character of Cough?

A. The cough is effected by first taking in a full deep inspiration, which is expired by a succession of short interrupted expirations, during the inspiration the hoarse, sonorous sound is produced & during the expiration the cough is effected.

C. Is anything brought up by the Cough?

A. Yes Sir. of mucus & a paroxysm of coughing frequently ends ⁱⁿ vomiting.

D. What is the effect ~~in~~ a paroxysm of Coughing has upon ~~Haematuria~~ *Haematuria*.

B. The blood is not properly coagulated, the face & lips are of a livid appearance.

E. Is it a dangerous disease?

A. It is not when uncomplicated.

F. How would you treat Phtisis?

A. In the first stage it should be treated as a case of bronchitis. that is with Emetics, mild Cathartics &c. Then use peach tree bark Sea. Bellow-wood. is recommended as a valuable article.

G. In what part of the Lungs do anatomical changes take place in *Phtisis Pulmonalis*.

A. In the apex.

H. In what does the radical part of the disease consist?

A. In tubercles which exist in the mucous membrane of the bronchial tubes. or in cells or interstitial structure of the Lungs.

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I. What are the three states in which tubercles are formed?

in the Lung?

A. 1. Crude or indolent state. Small whitish opaque mass. 2. A state of maturation or softening. 3. State of ulceration affecting the surrounding tissues

Q. Into how many stages is pulmonary Consumption divided?

A Three.

Q. What are the symptoms of the first?

A. Cough, Fever, burning in the palms of the hands & soles of the feet.

Q. What are the symptoms of the second?

A. Emission of fever, Cough, hurried respiration, inability to exercise, Night sweats

Q. What are the symptoms of the third?

A. hectic Fever. 2 paroxysms occurring in 24 hours the first commencing about 9 o'clock A.M. & terminating in Colloquation diarrhoea about 3 or 4 P.M. the other commencing about 9 o'clock P.M. & terminating by Colloquation sweat before day light.

Q. Is it necessary to pay attention to the expectoration in order in all cases to give a correct diagnosis in Consumption?

A. Yes Sir. but it is not to be neglected.

Q. How would you distinguish mucous from Pus?

A. Mucous floats in water. pus sinks if not mixed with air. If you dissolve them in Sulphuric Acid and then add water a precipitate will be formed by the pus. & not the mucous. Caustic potash will do the same. Corrosive sublimate will coagulate mucous but not pus.

Q. Can you invariably discover if Tubercles exist in the Lung by Auscultation & Percussion?

A No Sir.

Q. When can you detect tubercles in the crude state

Q. If a number of these are collected together forming a mass their existence in the crude state may be ascertained otherwise you cannot be certain of their existence.

B. What will ^{you} observed when tubercles exist in a mass by auscultation & percussion?

A. You cannot hear the vesicular murmur in the part affected, but it will be increased in the sound parts. by percussion will be found more dull over the part where tubercles exist.

2. What will be found to exist if the patient be examined by auscultation whilst the tubercles and surrounding parts are undergoing the ulcerative process.

A. The moist ruchi - & if there be a large excavation the cavernous Rouchus will be heard.

3. What can you hear by auscultation after a cavern has been formed, & the ulcerative process ceased.

A. Cavernous respiration & P. tonitruous. By percussion a resonant sound over the cavern. but over the surrounding part a dull unnatural one.

Q. What is the treatment for Consumption?

A. It is an incurable disease. Use light nutritious diet. inducing medicines or regimen is improper.

3. What is the most appropriate Serum for Croup.

A. Membranous Laryngitis. it refers to the anatomical character & seat of the disease.

3. What Change occurs in the voice?

A. It becomes hoarse dry & ringing. it is a first symptom.

Q. What is the character of the Cough?

A. Dry. sonorous hoarse grating. resembling the shrill bark of a little dog. or the crowing of a cock.

Q. What is the character of the respiration?

A. Excessive hurried & wheezing.

Q. Name some other symptoms of Croup?

A. The patient desires to be in the erect position, is much excited, there is great restlessness & agitation, the head is extended backwards, & there is a heaving of the chest, & an elevation of the shoulders, the face has a livid appearance, these symptoms all take place in consequence of a sufficient quantity of air not entering the Lungs.

Q. Is there generally difficulty in swallowing in membranous Laryngitis?

A. No Sir.

Q. Is there local pain?

A. Yes Sir a constricted pain

Q. Is there headache?

A. Yes Sir, & threatened asphyxia

Q. At what time does an attack most frequently come on?

A. At night & often suddenly

Q. An attack does not always come on suddenly does it?

A. No Sir it is frequently preceded by symptoms of bronchitis

Q. Is it generally rapid in its progress?

A. Yes Sir from 3 to 5 days.

Q. Is it a fatal disease?

A. It is unless appropriately treated

Q. Whose alarming history of this disease have you advised to read?

A. Dr. Dewees.

Q. Would that actually all cases of threatened croup

Q. Yes Sir for though many cases of what is called croup do terminate favorably, yet you cannot distinguish those cases in the commencement from true membranous Laryngitis.

Q. What are the anatomical changes which take place?

A. Inflammation of the mucous membrane of the Larynx sometimes extending into the Tracheal tubes. There is a false membrane covering the mucous surface of various consistence & extent.

Q. Is this membrane organized?

A. Yes Sir. Red vessels may frequently be seen passing into it. Dr. Ford says No. 1844

Q. Upon ^{what} does the difficult respiration croupal voice & cough depend in the early stage?

A. Upon the false membrane

Q. What is spasmodic croup?

A. A form of the disease coming on in paroxysms, commencing & abating suddenly. It is caused by a spasmodic contraction of the muscles of the Larynx.

Q. Upon what is this spasmodic action dependant?

A. An extension of the inflammation to them or they are by sympathy induced to act. & It may be said to be analogous to the irritable action of the muscles of the intestines in dysentery.

Q. What are the causes of Croup?

A. Atmospheric vicissitudes. It is very common in moist situations especially near the Sea Shore. There is perhaps a family predisposition, & there is individual predisposition by previous attacks. It frequently occurs during the prevalence of other diseases as Tonsillitis & Tracheitis &c.

Q. At what age does croup most frequently occur?

A. From 1 to 7 years. Sometimes in adults

Q. What would you use in the first stage to prevent the development of the disease

A. Spirits Turpentine

Q. How administered?

A. Take from 10 to 30 gtes Spts Turpentine with some Brown Sagar rub them up together then add gradually a wine glass full of water of this give a tea spoonful every 4 or 6 minutes.

Q. What other means would you use for the same end?

A. Revulsions over the Trachea & Larynx

Q. Would you employ bloodletting?

A. When fever comes on it should be bled

Q. Would you use local bleeding?

A. No Sir not generally. Cupps cannot be applied & if you use leeches you must expose the surface.

Q. What would you use to produce an external revulsive effect?

A. Sinapisms, Volatile Liniment Tincture Capsicum

Q. What was spoken of as a grand remedy in Croup

A. Emetics.

Q. As a general rule would you use Emetics freely?

A. Yes. produce full & extensive vomiting, the depressing & less effect produced even subsides & children bear the operation of Emetics very well

Q. What medicine would you use to produce emesis

A. Tartar Emetic

Q. Why not use a milder medicine?

A. Because Tartar Emetic may be given large doses without vomiting owing to the high state of inflammation in danger of obtaining the sensibility of the surface on which it has to act.

Q What would you use to aid the medicine?

A. Warm bath

Q. Are there any objections to the warm bath?

A. The most important is it leads to too much exposure

Q. There are other local applications mentioned, what?

A. Opts Turpentine rubbed on the surface. A piece of sponge dipped in very hot water applied over the larynx. The snuff plaster.

Q. Are there not dangers in using the snuff Plaster

A. Yes. Its effects should be closely watched lest prostration result.

Q. Is Lobelia appropriate in Croup?

A. Dr Ford remarked his experience with the article in croup was limited but he believed it to be a valuable remedy in this & other diseases

Q. Would you use Calomel?

A. Not in the first stage.

Q. When an attack of croup comes on at night is there an abatement in the symptoms in the day following?

A. Yes Sir but if not prevented there will be a great increase in their violence the next night.

Q. Keep the patient under the influence of Nauseants would you so prevent the attack?

A. Yes Sir.

Q. Would you give Calomel in Murmurous Laryngitis?

A. Yes Sir it is an important remedy.

Q. When and how would you give it?

A. On the day following the second attack or the increasing in violence of the symptoms in doses of From 2 to 5 grs every 2 or 3 Hours

- Q. Will it prove beneficial except as a resuscitant?
- A. It is absorbed & acts directly on the Stenosis.
- Q. Would you generally apply a blister?
- A. No Sir. The slowness of its operation & its interference it creates to the performance of Laryngotomy are weighty objects.
- Q. What remedies would you use if the false membrane had formed or was forming?
- A. Stimulating applications to the fauces, as powder of alum alone or mixed with sugar. A solution of Lunar Caustic. Emities, Laryngotomy & Tracheotomy.
- Q. How would you use the alum?
- A. Attach a sponge to a piece of wire, moisten the sponge then roll it in the alum & thrust it in the fauces.
- Q. What kind of Emities would ^{you} use at this stage of the disease?
- A. The nitrolic. As Sulph. Lime. in doses of 20 to 60 grs
- How would you use the Lunar Caustic?
- A. Make a solution of 60 grs to 17 water. or 24 grs to 13 water. Take the sponge attached to the wire (which should be bent near the end to which the sponge is attached) the patients must be extended... mouth widely opened. tongue depressed, the Epiglottis brought in view, then dip the sponge in the solution & carry it into the rima glottidis there hold it a short time & a spasmodic action of the muscles there will occur & thereby force out the solution from the sponge into the Larynx.
- Q. Would you place much reliance on this remedy in preventing the formation of the membrane or removing after it is formed? A. Certainly.

144 Laryngeal Pthiasis

Q. What do you think of making of opening in the Larynx or Trachea?

A. It is an operation easy & successful. when properly performed.

Q. Should you employ it when by physical signs you discovered the first instance of Pneumonia or Bronchitis?

A. No Sir. But the objection that false membranes frequently extend into the bronchial tubes should not prevent you from performing the operation for the false membrane invariably becomes more & more difficult as it descends for the larynx. It is much better that this operation be performed unnecessarily than that it should not be performed when necessary therefore it should be, as is generally done postponed till the patient is in the artificial artificial mortis.

Q. Is it not probable that in using the nitrate of silver in treating Croup that some of it will be swallowed?

A. Yes unavoidably.

Q. What thus would you use to decompose it or make it inert or harmless?

A. The Chloride of Sodium.

Q. What will be formed by the Nitrate Silver & Salt acting on each other?

A. Murate of Silver

Q. What is Laryngeal Pthiasis?

A. A chronic inflammation of the mucous membrane of the Larynx. Commonly called Chronic Bronchitis.

Q. Name the most prominent symptoms of this disease

B. There is Cough, difficult respiration, alteration in the voice. Sometimes complete ~~asphyxia~~ aphonia, mucous expectoration brought up without coughing. Some difficulty in swallowing pain & dysphagia in the larynx. in advanced stage hectic fever.

Q. What do you perceive by examining the mucous membrane of the pharynx when the patient opens his mouth widely?

A. It appears, tumid, spongy, & lacerated.

Q. What is the most common cause of this disease?

A. Syphilis. Frequent long & loud speaking.

Q. With what is it most commonly complicated?

A. Phthisis Pulmonalis.

Q. What is the treatment.

A. The constitutional treatment should be antiphlogistic as bloodletting generally, & Purgatives. The local treatment consists in the abstraction of blood by leeches, Blisters. And Stimulants directly applied to the mucous membrane.

Q. In what stage would you prefer using the stimulating powders or solution?

A. In the early stage.

Q. Would you use the Nitrate of Silver as in Croup?

A. Not Sir.

Q. What is the composition of the powders said to be advantageous in this disease?

A. Subnitrate Bismuth alone; Coloured part to white sugar 12 parts. Alum 1. White sugar 5. Sugar of Lead 1. White sugar 7. Red precipitate 1. White sugar 36. Nitrate of Silver 1. White sugar 24 to 71.

146. Disease of The Throat

Q. How are these powders to be applied?

A. They are to be reduced to a very fine powder and are to be inhaled through a glass tube about $\frac{1}{2}$ inch in diameter 6 or 8 long. The patient should make a forcible expiration then receive one end of the tube in the pharynx. that is, posterior to the Epiglottis. the other being in the powder. He is now to inspire through the tube.

Q. Suppose the Mucous membrane is so tumified that the patient is in actual danger of suffocation?

A. Perform Tracheotomy.

Q. What do you understand by Tonsillitis?

A. An inflammation of the Tonsils. Called often Quinsy

Q. What is the Treatment?

A. In the early stage use Stimulating applications at the insertion of red pepper. Bring the Constitution to the antiphlogistic plan. If the Tonsils are so enlarged as to endanger life by suffocation. perform Tracheotomy.

Q. What are the reasons given why you should study well the diseases of the Heart?

A. The heart is one of the most important organs. its action is essential to life. & healthy or normal action to health. Some diseases of it are incurable. you should be able to distinguish between those that are and those that are not. Diseases of the heart are of frequent occurrence. as will appear from a consideration of the numerous causes that disturb its healthy action

Q. Name some circumstances which modify the action of the heart.

A. Muscular exertion voluntary or involuntary, long

continued, immoderate exercise, mental emotions
exciting or depressing &c &c

Q. What is the foundation of the study of the diseases of the Heart?

A. Anatomy & Physiology of that organ.

Q. Tell the position of the Heart?

A. In the Anterior Mediastinum, behind the sternum
extend more to the left side. the apex about opposite
the 5th intercostal space, base behind the Sternum, the
lateral parts covered by the Lungs, leaving uncovered
a space of 1½ or 2 inches square.

Q. What are the tissues entering into the composition
of the Heart?

A. Muscular, fibrous, serous, cellular, adipose
vascular & nervous.

Q. How many sounds produced by the action of
the Heart?

A. Two, the first & second sound.

Q. At what is the first produced?

A. During the contraction of the ventricle, &
is synchronous with the beat of the apex against
the parietes of the chest, & the beat of the pulse.

Q. Can that portion of the Thoracic wall against which
the apex strikes be seen or felt move?

A. Yes Sir.

Q. What is the character of the first, compared with the
second sound?

A. More dull & prolonged.

Q. What causes this first sound?

A. By the tension & contraction of the auriculo
ventricular valves, & the apex of the heart striking
the wall of the chest.

Q. What causes the second?

A. The distention of the semilunar valve.

Q. What inducement is there for you to study the abnormal sounds of the heart?

A. They are few in number & produced by the physical actions of solids and fluids.

Q. The abnormal sounds are divided into 2 classes in what do they first consist?

A. Sounds which differ from the natural only in degree, that is greater or less.

Q. Is there any difference of importance in the natural sounds of different individuals?

A. There is. In some fat individuals the action of the heart can scarcely be heard. in some nervous subjects it beats violently.

Q. When the sounds are increased do they become clearer or duller?

A. Clearer. more resonant. And diminished they become duller.

Q. Can an increase or diminution of the natural sounds of the heart be taken as certain indications of that organ.

A. No Sir.

Q. Does the force with which the apex of the heart strikes the walls of the chest vary in different individuals in health.

A. Yes Sir as to sounds.

Q. Does it vary in degree from many circumstances beside disease?

A. Yes Sir It is by the continuance of the variation of the sounds & impulses of the heart. & a consideration whether the variation from

is natural to a peculiarity of the individual, that you are able to determine in respect to the existence of disease.

Q. When the impulse of the heart against the parietes of the chest is violent, so much so as to raise the head of the observer, or to be heard at a considerable distance. What is that sound which may then generally be heard called?

A. Metallic, or tinkling sound.

Q. How you refer to an undulating sound?

A. If you place the palm of your hand on your ear, & strike it on the back with the end of your finger, the same kind of sound may be heard.

Q. What division was made of the second class of sounds?

A. Superficial & deep seated.

Q. How are the superficial sounds produced?

A. By the rubbing of the opposing surfaces of the pericardium.

Q. Is there any appreciable produced in this way in health?

A. No. In the smooth & polished surfaces pass each other with any sound.

Q. What was the first sound called which is produced by the rubbing of the rough surfaces of the pericardium?

A. The rough superficial or pericardiac sound.

Q. What kind of a sound is it?

A. Like the sound produced by rubbing together two surfaces of a new barrel bolt, or the palmer

surface of one hand, with the palmar surface of a finger of the other.

Q. What is the second sound called?

A. The crackling or pericardiac sound.

Q. Give a similar sound?

A. That produced by a raw saddle.

Q. What kind is the third or last?

A. It is grating more harsh than the others caused by rubbing the surface of the pericardium when there is a roughness on these ossified plates or catarrhous.

Q. If there be inflammation which of these sounds will be heard?

A. If it be not intense the first or rough, but if intense the second or crackling sound.

Q. Are these sounds influenced by respiration?

A. They can be more distinctly heard during respiration.

Q. Are they influenced by the action of the heart?

A. They are heard more distinctly during the contractions of the ventricles which enable you to distinguish them from those of the pleura when it is inflamed.

Q. May all the described sounds or those which are produced in the cavity of the heart be all included under one generic term?

A. Yes Sir. the bellows or blowing sound analogous to the sound produced by the air passing through the nozzle of a bellows or that produced by the wind in blowing out a candle.

Q. How many species of this genus are there?

Q. How - 1. proper blowing sound. 2. like the sound of sawing - 3. like rasping wood with a coarse file. 4. a sibbling or whistling sound.
 Q. How are these sounds produced?

A. By the action of the blood against the heart while the latter is in an abnormal state, as from a thickening of the valves, from their inefficiency to form a complete septum, from the existence of tumours or polypus in the cavity of the heart.

Q. What is pericarditis?

A. Inflammation of the Pericardium

Q. When this membrane is examined in those who die in the early stage of this disease what is observed?

A. It will be covered by a secretion which consists of two parts. The first is a pale serous fluid, varying in quantity from $\frac{1}{2}$ oz to several pints. The other is coagulable lymph or albumen of the colour & appearance of the buffy coat of blood. It covers the surface from its thin lines in thickness, it presents a reticulated appearance, & it is very similar to what occurs when plates which have been smeared with oil and placed in contact are separated.

Q. Is this effusion an early symptom?

A. It is. It is a mistake to say that it occurs only at the termination of the disease.

Q. Will the membranous secretion become organized if the disease continues? (with blood)

A. It appears to be, but it is the substance injected =

Q. Now are the symptoms of pericarditis divided?

A. Into ^{two} Functional & Physical

Q. In simple Pericarditis if the pain is intermittent?

A. It is not unless the inflammation be intermittent. But there is an uneasy sensation in the pericardial region & pressure in this region the pain is increased & so it is coughing, dyspnoea, percussion, &c.

Q. Can you generally easily detect the existence of the effusion by percussion?

A. Yes Sir.

Q. What can you learn by auscultation?

A. The pericardial sounds may be heard varying according to the degree of inflammation. When there is effusion the valvular sounds will not be so distinct it will appear to be at a greater distance than usual. very frequently the bellows sounds are heard particularly if complicated with Endocarditis.

Q. There is fever is there?

A. Yes Sir. The temperature of the surface is increased. the pulse full. strong & regular. face flushed & there is considerable headache.

Q. Are these last named symptoms invariably present?

A. No Sir sometimes the heat of the surface is unequal. the face pale. Pulse small tense & irregular with the appearance of great prostration.

Q. Do you think this disorder frequent occurrence?

A. Yes Sir. May exist without being known.

3. What is it most frequently complicated with?
 A. Pleuritis Pneumonia Pericarditis. Rheumatism & Scat.

3. What are the most common causes of Pericarditis?

A. Mechanical violence; vicissitudes & noisiness in the Atmosphere. Moral affecting &c

3. What is the Treatment?

A. It should be antiphlogistic.

3. Would you practice venesection?

A. Yes Sir.

3. Would you perform local bleeding?

A. Yes Sir. apply Cope, Leeches & Scarifications over the inflamed membrane.

3. How would ^{you} administer Tartar Emetic?

A. ʒss to ʒss every 3 or 4 Hours.

3. Would you apply a blister to the pericardiac region?

A. Yes Sir. after performing local bleeding.

3. What do you think of digitalis?

A. It is recommended by high Authority but I have had little confidence in it.

3. What would ^{you} administer to quiet the tumultuous action of the Heart if it existed?

A. Prussic Acid.

3. In those cases where the pulse is small & irregular the face pale. & surface covered with a cold perspiration the pains severe the Cardiac region would you bleed?

A. Yes Sir. it is however difficult to get the blood to flow. a diffusible stimulant may thus be used the Sulphuric or Chloric Ether etc effects.

Endocarditis

of which are unrescued & use Cups & Leeches
 & sinapisms to the Cardiac region
 I Does Pericarditis sometimes assume a chronic
 form?

A Yes Sir.

I What symptoms then occur

A The local symptoms of the acute form are
 mitigated but continued. there occurs frequent
 palpitation, a bloated appearance of the con-
 tinuance of the Pericardium of the feet & sometimes
 of the whole surface.

I What would be your treatment for this
 form of the disease?

A. The antiphlogistic but less vigorously than in
 the acute form.

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I What is Endocarditis?

A. Inflammation of the membrane which lines
 the Cavities of the Heart.

I What changes take place in this membrane

A. Similar ^{what} to occurs in serous membranes. Inflammation,
 false membrane, nodules, thickening, roughness,

I Are not the valves sometimes altered in their
 structure?

A. Yes Sir. They become thickened, tuberculated,
 cartilaginous, ossified sometimes adhered to the
 sides of the ventricle.

I Is the pain very violent?

A Not generally! It is rather an uneasiness than a
 violent pain. The physician who does not discover
 this disease before his attention is called to it
 by the pain will likely be too late in his diag-
 nosis.

Q. What are the signs which you obtain by percussion?

A. They are of a negative character
 Q. What would ^{be} heard by auscultation?

A. The proper bellows, the sawing or rasping.
 Q. Is the disease frequently complicated?

A. It is with Pericarditis, Rheumatism, Pleuritis
 & Pneumonia

Q. What is the treatment

A. The same as Pericarditis, only more vigorous

Q. What is Hypertrophy of the Heart?

A. An increase of the muscular tissue of that organ
 & an enlargement.

Q. Is there an alteration in the nutritious matter
 deposited?

A. No Sir, the natural composition is not changed

Q. May softening of the heart become hypertrophic?

A. Yes Sir. The ventricles however are more frequently
 affected & especially the Left

Q. How is Hypertrophy of the heart divided?

A. Into 3 varieties.

Q. What are they?

A. Simple passing without any increase or decrease
 in the size of the Cavities. 2 Concentric
 occurring with a diminution in the size of the Cavities.
 3 Eccentric with increase in the size of the Cavities.

Q. What is the immediate cause of Hypertrophy
 of the Heart?

A. An usual action of that organ

Q. What are some causes which excite the
 heart to unusual action

A. Fatiguing exercise, Occupation requiring

156 Hypertrophy of the Heart

much muscular effort; moral emotions;
Chronic phlegmasia; Stimulating diet or drinks;
Mechanical obstructions in the Cavities of the Heart,
or large arteries.

Q. Is Hypertrophy of the heart dangerous when
not complicated?

A. No Sir. But it is most commonly compli-
cated with disease of the Valves.

Q. Can the size of the heart be ascertained in life?

A. Yes Sir. By percussion.

Q. Who could make the exact size of the heart
by immediate percussion?

A. No one.

Q. What is the best mode for ascertaining the
size of the Heart, Liver, &c in life?

A. By stethoscopic percussion.

Q. What is meant by that mode of performing
percussion.

A. You use a solid Cylinder to transmit the
sound to the ear, the objective end should be
forcibly pressed against the wall of the Chest so
as to bring it against the Heart.

Q. What is the weight of the heart in a healthy state?

A. About 8 $\frac{1}{2}$ lbs.

Q. Is its weight sometimes much increased by Hypo-
trophy?

A. It is — weighing 220 $\frac{1}{2}$ lbs.

Q. Is the force with which the Heart strikes generally
increased in proportion to the increase of size?

A. Yes Sir. Repelling the hand or hand from the Chest.

Q. Is there generally a difference in the size of the 2
sides of the Chest.

Palpitation

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Q. The left side is the largest, the intercostal space more salient

Q. Can the valvular sounds of the heart be heard

A. Yes. plain than natural.

Q. What is the character of the pulse?

A. Full & vibrating

Q. What is the appearance of the skin?

A. It has a peculiar brilliant red color like the face

Q. What of the eyes?

A. Remarkably bright

Q. If hypertrophy be complicated can the pulse be taken as a guide?

A. No. For instance if there existed an obstacle at the orifice of the Aorta, the action of the heart might be tumultuous & yet the pulse feeble.

Q. What is the treatment?

A. Purgatives, rest, diet, & sedatives

Q. What sedatives would you use? Feb. 24

A. Digitalis & Lussac's acid

Q. What is meant by palpitation of the heart?

A. It is one of the nervous of that organ characterized by intervals of unusual force & rapidity of action accompanied with the bellows sound.

Q. Which of the Temperaments is most liable to palpitation of the heart?

A. The nervous

Q. What are the most common causes

A. Physical shocks, mental emotions, disappointed love has a remarkable effect. also nostalgia, irregular hours, late sitting up, masturbation, use of tobacco in any form.

Q. What the use of Tobacco the effect of rendering irregular & unsteady the motion of the voluntary muscles?

A. Yes Sir. & it is reasonable to suppose it will have the same effect on the involuntary.

Q. What class of persons is frequently affected with palpitation?

A. Chlorotic females

Q. Is it not a great inducement to study the disease of the heart, that you may be able to inform these females, that though the heart palpitates forcibly, there is no incurable organic disease?

A. Certainly. To tell a woman that there is an organic disease of the heart or uterus is to destroy her happiness.

Q. In the palpitations of the heart occurring in chlorotic patients, what can you hear by placing the stethoscope over the large arteries?

A. A musical sibilant sound.

Q. Does palpitation sometimes depend upon a plethoric state of the system?

A. Yes Sir.

Q. What is the indication in the treatment?

A. To improve the general health or remove the state of the system upon which depends.

Q. What is the proper treatment when depending upon a chlorotic state of the system?

A. Tonics, invigorating diet, exercise &c &c

Q. Is not some portion of the spinal column found to be tender to pressure in most cases of Palpitation?

A. Yes Sir. & entire relief obtained by an applica

tion to the tendon portion.

2. Is not the heart principally supplied with nervous influence by the sympathetic nerve?

A. Yes Sir.

2. Is it not regarded as a system of nerves different from & to a great degree independent of the cranial & spinal nerves?

A. It is so regarded by some but anatomy shows its ultimate connection with the spinal nerves.

3. Upon what do you suppose neuralgic pains & Angina pectoris dependent?

A. Spinal irritation generally.

Q. What is there of this?

A. The numerous recorded cases from different sources of the sudden & permanent relief afforded by applications to the spine place the question beyond dispute.

Q. What is syncope?

A. A sudden suspension of the action of the heart, intellectual functions & voluntary motion.

2. What is the proximate cause?

A. Suspension of the action of the heart.

2. Do you regard syncope as a trivial occurrence?

A. It should not be so regarded though generally lasts but a short time, it is sometimes fatal.

2. What are the causes of syncope?

A. Strong physical exertion, impressions on the general system or on the mind, mental emotions, loss of blood, violent pain sometimes.

2. What is the principal remedy for relieving syncope?

A. Place the patient in the horizontal position

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Q. When you find a drunkard in the erect position what generally occurs?

A. Syncope terminating in convulsions or spasms

Q. Will the recumbent position relieve the spasmodic state of the system?

A. Yes Sir.

Q. Are the diseases of the abdomen various & numerous?

A. Yes Sir.

Q. You recollect the regional divisions of the abdomen the situation of the organs. Do you?

A. Yes Sir.

Q. What are the modes by which physical investigations of the abdomen are made?

A. Inspection palpation & percussion.

Q. What do you ascertain by inspection?

A. You can judge of the fullness or emptiness or the prominence of any organ &c

Q. Is palpation an important means in judging of diseases of the abdomen?

A. Yes Sir. more valuable than inspection

Q. How do you examine a patient by palpation?

A. By placing him on his back. Shoulders head & hips elevated. thighs flexed. the stomach & intestines empty, &c then you can judge of the size & sensibility &c of the Liver Spleen & other organs.

Q. Can you by percussing ascertain the different conditions of the organs that you can by palpation?

A. Yes Sir. they aid & assist each other and should both be practiced.

2. What is Gastritis?

A. Inflammation of the mucous membrane of the stomach.

3. By some this affection is supposed to give rise to nearly all fevers. Is it not?

A. This is the doctrine taught by that great genius & reformer of the medical science, Boissais, & though his principles as regards the local origin of all diseases may be correct, his application or specification of them are erroneous.

4. But you regard acute Gastritis as a very important disease do you not?

A. Yes Sir. There is not a fever but what is complicated with it. It exists as an idiopathic disease very often and then it is even a dangerous malady.

5. Has the mucous membrane a high state of organization?

A. It is very vascular & well supplied with nerves. From a consideration of this fact & the extremely numerous and varied influences to which it is subject it is astonishing that it is not more frequently diseased.

6. Comparing the relative exposure to the influence of extraneous causes of the skin, & mucous membrane of the stomach & considering the numerous diseases to which the skin is liable would you not infer that the diseases of the mucous membrane were more numerous & varied?

A. Yes Sir. The diseases of the skin of the skin can be distinguished by inspection but not so with the mucous membrane of the stomach & we are left to infer the existence of disease varying

in character, from analogy to the functional symptoms.

Q. What are the anatomical changes that take place in inflammation of this membrane?

A. Change in the Color & Consistency.

Q. What is the natural Color of this membrane?

A. Pale rose color.

Q. What are the most frequent changes of color?

A. Sometimes the whole surface presents an uniform red appearance, sometimes arborescent, sometimes circumscribed spots, & sometimes the color verges to black or there may be an effusion of blood covering the membrane.

Q. Which of these is the most certain indication that inflammation has existed?

A. The red punctuated spots.

Q. Is the membrane sometimes considerably softened?

A. It may be scraped away with the back of the scalpel, in extreme cases, but the membrane will become softened by putrefaction or the action of the gastric juice and is therefore to be considered an equivocal sign of inflammation.

Q. What author considers all the symptoms of Permittent Fever dependent on acute gastritis & therefore treats of R. Fever under acute gastritis?

A. Andral.

Q. Give the symptoms of Gastritis occurring young females of bad habits as regards sleep, exercise & diet &c

A. The precursive symptoms are, dulness

Pain in the head, loss of appetite, a general feeling of uneasiness, Pain in the back & limbs, an increase in the circulation & respiration, an altered state of the tongue, tenderness on pressure.

2. What is the Situation of the Pain?

A. It is generally in the Epigastric sometimes extending into the umbilical, the right or left Hypochondriac regions according to the part of the stomach affected.

3. What is the Character of the Pain?

A. A heavy burning pain. if the peritonium become inflamed the pain will then be violent, the pain is increased by the weight of the bed-clothes or a poultice. It is also increased by food or drink particularly if the drink be warm, pain is always present.

4. Is the nausea & vomiting generally present?

A. Yes Sir, distressing nausea is almost always present, being relieved only temporarily by the process of vomiting.

5. Does the vomiting return without taking anything into the stomach?

A. Yes Sir sometimes bile is vomited which leads to the administration of bilious remedies which increase the disease.

6. Is thirst generally present?

A. It is.

7. Is there usually loss of appetite?

A. Yes when occurs in those persons who live to eat. They do sometimes experience some uneasiness or aversion which attribute to hunger, but if food be taken it will increase the disease.

Q. Are the bowels sometimes torpid?

A. Yes Sir, the sensibility of their surface is diminished by the inflammation in the stomach upon the principle of nervousness.

Q. What is the condition of the fauces & mouth?

A. Dry & Red.

Q. What is the appearance of the tongue?

A. Generally dry, red & contracted, the papillae at the end enlarged, if there be fur on the tongue the papillae will rise through it & the fur will be rough. Sometimes the tongue will be swollen & red covered with a yellow brown or dark crust, the tongue is never found in the natural state.

Q. Is the breath of the patient offensive?

A. Yes Sir.

Q. What is the condition of the abdominal muscles?

A. Rigid, contracted to prevent any motion in the stomach.

Q. What symptom was that mentioned as being almost uniformly present & which must be regarded as cause or effect?

A. Tenderness of the upper & middle dorsal vertebrae by pressure.

Q. Will there anything more than tenderness manifested by pressing upon the portion of the spinal marrow that is affected?

A. There will be an increase of the symptoms during the time the pressure is made, the patient will sigh, have cramp &c &c

Q. Is there cough in acute Pleuritis?

- Q. Generally, there is a dry hacking cough.
2. What is the character of the Respiration?
- A. Frequent, not full.
3. What of the skin.
- A. Dry & husky.
3. Is there generally headache?
- A. Yes Sir.
3. Is there pain in the Lumber region?
- A. Yes Sir. & in the limbs, particularly in the knees & ankles. which is distressing grooves King, & affections of the extrinsecks.
3. What is the character of the pulse?
- A. Frequent, hard, not full.
2. What symptoms mark extreme gastric inflammation?
- A. Cold extrinsecks, small frequent pulse, great prostration of the vital powers, great muscular debility, occurring early in the disease.
2. What is the prognosis?
- A. Idiopathic gastritis occurring from vicissitudes of the atmosphere, improper diet &c very rarely proleptical.
2. How does it terminate generally?
- A. Resolution. Acute gastritis not infrequently terminates in the chronic form, in consequence of too early relaxation of the antiphlogistic treatment.
2. What are the causes of acute gastritis?
- A. Atmospheric vicissitudes, stimulating diet to those unaccustomed to it, privation from food, poisons, & Chronic Gastritis predisposes to an attack.

Q. How long would you restrict a patient?

A. To what it turned on absolute diet, from 4 to 72 hours.

Q. Would you generally perform venesection in Acute Gastritis?

A. Yes Sir, when there is frank fever there is generally no hesitancy in bleeding, and depression occurs in the early part of the disease the use of the lancet is imperiously demanded.

Q. How would you bleed?

A. Place the patient in the erect position, make a free large orifice for purposes of inducing Syncope.

Q. What is the advantage of inducing syncope?

A. The capillaries are known to contract after the cessation of the action of the heart & arterial & give to the distended capillaries the power of acting.

Q. Is local bleeding proper?

A. Yes Sir, & important. there are two locations whence it should be drawn, the Epigastric & along the spinal Column.

Q. Would you use cups & leeches at each place?

A. If cups are used upon the Epigastrium they should have valves, that the exhaustion may be gradual, any kind may be used along the spine.

Q. Would you allow any food & drink?

A. Food should be proscribed in acute gastritis & as little drink taken as the patient will be content with, it should be charged with mucilage.

Q. Would you use medicine?

A. Not by mouth.

Q. When nausea & vomiting is distressing would

you not attempt to relieve it?

A. A very small quantity of some diffusible stimulant may be given, as a Teaspoonful of Camphorated water, a small quantity of Chloric Ether. Peppermint water &c &c.

Q. Other medicines are recommended what others?

A. A small quantity of lime water & cream, Peach leaf Tea &c.

Q. What do you think of giving the patient large draughts of warm water?

A. Very good, tho. should be often repeated, to produce free vomiting, & wash from the stomach foul secretions.

Q. What other good effect has warm water?

A. It dilutes the vitiated Blood, which is known to exist by a uniform symptom almost stranguary.

Q. Would you use injections?

A. Use stimulating injections, & anodyne injections to quiet the stomach, give rest & not of quietude to the patient.

Q. If the disease continued unabated, what application would you make to the Epigastrium?

A. The mustard plaster, & peach leaves, if these will not do, apply a blister.

Q. If the disease continues many days would you not use the blue pill?

A. Yes Sir. 3 or 4 grs every 4 or 6 Hours.

Q. What did Dr Ford say in regard to his success in treating acute Gastritis by the remedies mentioned?

A. He never had a case of Idiopathic gastritis to terminate fatally, except those caused by poisons.

on ing.

Q. How would you treat Chronic Gastritis.

A. With a moderate antiphlogistic treatment, the blue pills or calomel, should be persevered in till the last remnant of the disease is eradicated.

Q. What is meant by the nervous affections of the stomach?

A. Those diseases in which there are disordered functions without any appreciable organic alteration the seat of the affections is the ganglions of the nerve or the spinal marrow.

Q. Do they depend upon an excess & deficiency of nervous action?

A. Yes Sir, one or the other.

Q. What are the symptoms of the nervous affections of the stomach which frequently occur in students?

A. There is a heavy dull languid feeling, particularly after eating, loss of appetite, pain in the region of the stomach, nausea vomiting & headache &c.

Q. What is the treatment?

A. Give diffusible stimulants if this does not, relieve. Use Cocharctic.

Q. How would you distinguish the pain of gastritis from that of gastralgia?

A. In gastralgia the pain is more intense, it is intermittent, it is generally accompanied with neuralgic pains in other parts, it is relieved by stimulants the other is increased by them, when violent there occurs a violent spasmodic contraction of muscular coat of the stomach.

Q. How would you relieve the violent Cramp in the stomach?

Q. Give $\frac{1}{2}$ of Laudanum in tumbler of warm water repeating it as often as it is rejected by the patient until relieved.

Q. When a portion is retained what will you then do?

A. as soon as he is relieved give him large draughts of warm water to produce emesis, by which the Laudanum may be rejected: & its unpleasant effects avoided.

Q. I suppose the pain & cramp return after being relieved by Laudanum. What would you then do?

A. Apply a sinapism or blister to the spine, give 20 grs Calomel followed by a dose of Castor oil. Use the Sulphate of Magnesia. & Flowers of Zinc.

Q. What are the organic changes from acute enteritis?

A. The mucous membrane of that portion of the canal which is inflamed is permanently, reddened, thickened & softened. Sometimes all the coats of the intestines are ulcerated they are very rarely mortified.

Q. What are the causes?

A. Atmospheric vicissitudes, cold applied to the feet, the imperfect food, poison.

Q. What is the character of the pain?

A. A dull heavy pain increased by pressure.

Q. Will the location of the pain vary according to the portion of the intestinal canal inflamed?

A. Yes Sir. Sometimes in the umbilical. Sometimes in the right hypochondriac or the right iliac region.

Q. If the pain be felt chiefly in the right hypochondriac region what portion of the canal is affected?

A. The duodenum

Q. What then occurs?

Q. A jaundiced skin because of the thickening of the mucous coat of the ductus communis cholidocus. nausea & vomiting. bowels costive &c

Q. Is there fever in acute mucous enteritis?

A. Yes Sir. a frequent pulse. headache. furred tongue dry skin &c

Q. What is the treatment?

A. Bleeding generally, & locally. Blisters. a Laxative dose of Castor oil, mucilaginous drinks Calomel 1 gr every one or two Hours. if the evacuations be excessive give the Calomel combined with Camphor & opium.

Q. Do you consider Diarrhoea a disease uniformly depending on a certain organic condition of the intestine?

A. No Sir. It is a symptom which is a consequence of various states of the intestinal Canal. it is caused by inflammation & by a lacerity of the mucous membrane.

Q. What is diarrhoea?

A. An increased number of alvine evacuations varying from what is natural in quantity & quality?

Q. Of what do the discharges consist?

A. At first the faeces then a serous or mucous, or seromucous fluid. frequently mixed with blood. more or less intimately according to the portion of the intestines from which it comes.

Q. Does diarrhoea exhaust the system rapidly?

A. Yes Sir. as much as haemorrhage

Q. Is one plan of treatment appropriate in all cases?

A. No Sir. The colloquative diarrhoea is certainly not to be treated as diarrhoea occurring in mucous enteritis. Diarrhoea is sometimes caused by a dose

- of Castor oil, or by improper food. in these cases blood letting would be as inappropriate as in diarrhoea proceeding dissection.
2. If the discharges are copious & dependent upon a laceration of the vessels. what medicine would you give?
- A. Pills of opium & Capsicum 1 gr each every 3 hours; Sugar of lead 3 grs Opium 1 gr, Elivir vitrid 8 to 10 grs; Opium 1 gr Sulphate Copper $\frac{1}{2}$ gr; Opium 1 gr Sulphate Zinc 1 gr.
3. What is cholera morbus?
- A. A spasmodic disease in which there are excessive vomiting & purging.
3. At what time does the disease commence?
- B. At night
3. What are the symptoms?
- A. There is nausea, griping pains, in the bowels above evacuation at first natural, then serous & mucous mixed. vomiting. increased pain. Cramp in the abdominal & intestinal muscles. Rapid exhaustion &c
3. What are the cause?
- A. What predisposes to it, Cold excites it. indigestible food. large quantity of food &c
3. What is the treatment?
- A. Give large draughts of warm water to cleanse the stomach & warm diluent drinks; Brandy, Camphor, Laud water, Anemona, musk &c. when reactions become excessive & safely revulsives to the skin administer laudanum by the mouth & in enemata. if the vomiting continues Sulphuric Ether, peppermint, Chloro Ether &c, this latter

is preferable to the sulphuric, because it is not so volatile & can therefore be more easily swallowed.

Q. Are there various opinions respecting the nature of Asiatic Cholera?

A. Very various.

Q. What are the changes that have been most frequently observed in those who have died of Cholera?

A. The stomach & intestines are inflamed some times. Vicious congestion of the abdominal viscera, the large & small bowels are distended the changes of the blood in its physical and chemical properties, it is deprived of its saline ingredients, the bladder void of urine.

Q. How an attack generally comes on suddenly

A. Yes Sir

Q. What are the symptoms?

A. Excessive vomiting of thin watery milky fluid, griping pain, skin pallid & trunk pale & small & frequent, tongue covered with yellowish fur, soft anorexia & cold; great thirst intellectual functions altered; a desire to eat, respiration hurried, pulse imperceptible &c if the patient recovers fever will be developed

Q. What is the cause?

A. A miasmata of specific character.

Q. How is the treatment divided?

A. That proper during the early stage, the stage of collapse, & the fever which supervenes when the patient recovers?

Q. What is the treatment for the first stage?

A. If the pulse be strong. bleed, give Calomel & opium in repeated doses.

Q. What remedies in the stage of Collapse?

A. Aether or alcohol to the skin. As the hot bath friction made with Turpentine. Blisters to the spinal column, Sinapisms to the Extremities & Anus.

Q. Will bleeding be proper during the fever which supervenes when the patient recovers from the primary attack.

A. Yes Sir. generally, then use Saline cathartics & stimulating injections &c

Q. What is Dysentery?

A. An inflammation of the mucous membrane of the large intestines. Characterized by gripping pains in the bowels, Tenesmus. the bowels really being in a costive state, there being only Syctalla. mucous & blood discharged.

Q. What changes occur in the mucous membrane?

A. It is thickened, reddened, softened frequently ulcerated frequently covered with a false membrane, which is sometimes discharged during the life of the patient, & is regarded by many as the mucous membrane.

Q. What are the symptoms of dysentery?

A. Fever rather of a Typhoid character which is frequently developed before the local symptoms. The pulse frequent small hard. Tongue furred. Sometimes, nausea & vomiting. Severe gripping pains, there is a spasmodic contraction of the recticular muscles which press forcibly upon the hardened faeces. Which are occasionally discharged mixed with mucous & blood, giving temporary mitigation.

tion of the symptoms, the extremities are cold &c
 Q What are the Causes?

A Vicissitudes of the Atmosphere. miasmata indigestible & unwholesome food &c &c

Q What are the three indications in treating Dysentery

A. 1. Moderate or subdue the general Fever. 2. Restore the action of the Stomach & Liver. 3. Relieve the contraction of the muscular muscles. by opening the bowels &c

Q Is Blood letting generally necessary?

A. Yes Sir. it diminishes the fever, the local inflammation, it produces relaxation, inducing diarrhoeas & an abatement in the spasmodic contraction of the Muscles.

Q Would you use an Emetic?

A. Yes Sir. Ipecac aided by warm water Tartar Emetic should not be used.

Q. What medicine would you use as a Cathartic

A. Calomel in scruple doses with 1gr of Ipecac repeated every 6 hours. which restores the action of the Liver promoting bilious evacuations varying colour. Castor oil may be advantageously used if the Calomel does not act, if the griping be severe Combine 10 grs Dover's powder with the Calomel. & leave out the Ipecac.

Q. Would you generally use Opium?

A. They are indispensable, use a teaspoonful of Laudanum in 1oz thin starch or gruel. or some diluent ~~mixt~~ fluid as an injection. it should be injected with a small syringe, a short pipe & introduced very gradually. repeated, Repeat it: if it will not be

retained roll up 5 or 6 grs of Opium & introduce it within the sphincter ani. or use as an injection a solution of the Sulphate of morphine

Q. What would you do to restore the secretion of the skin?

A. The warm bath, Ureas 1 or 2 gr. every hour
Sinapisms to the Extremities

Q. Would you use Local Bleeding?

A. Yes Sir over the inflamed intestines then if the disease continues apply a Blister.

Q. The cured mentioned feel what would you do?

A. Use Stimulating articles such as Jussier Tea.
if the disease still persists a strong solution of Sugar Caste injected into rectum is believed to be true

Q. What is Colic?

A. Spasm gripping Pain usually about the umbilical region occurring in Paroxysm & relieved by pressure, & a constricted state of the bowels

Q. Do you think there is any need for dividing it into bilious & flatulent Colic?

A. No Sir. They should be regarded as grades or degrees of the disease.

Q. What persons are most disposed to Colic in the first degree or in the mild & simple form.

A. Nerynrous persons. & hysterical females

Q. What are the exciting causes?

A. It is frequently produced by strong mental excitement or some article of diet. &c.

Q. What are the symptoms?

A. Intermittent gripping Pain (relieved by pressure) with eructations &c &c

176.

Q. How is this relieved?

A. By some diffusible Stimulant as camphor water
Peppermint &c &c

Q. What name is given to colic from the fact
that it is a nervous affection or an affection
of the nervous System?

A. Enteralgia.

Q. What is the pathology of Colic?

A. An affection of the Spinal marrow or gang-
lions or both. with a spasmodic contraction of
the viscerular muscles.

Q. What are the symptoms of a more violent degree

A. There is violent excruciating pain in the umbilical
region, Contractions of the abdomen, the patient
bends his thighs & chest on his abdomen. Pressed
upon it with his hands, vomiting; skin pallid
with cold sweat, the pulse frequent small and
irregular. During the paroxysm. A frequent desire
to evacuate the bowels. the attempts are unavail-
ing, a frequent swallowing of air, which passed
from the bowels, is the relief of the patient, after
the paroxysm the patient enjoys comparative
ease.

Q. Is there tenderness by pressing on the Spinal
Column.

A. Yes Sir. generally; & the pain in the abdomen
alternate with pain in the extremities particularly
the lower.

Q. Does vomiting of faecal matter sometimes
occur?

A. Yes Sir. which is dependent on gangrene.
or great nervous depression.

Q. What are the symptoms indicating that gangrene has occurred?

A. There is a cessation of violent pain, great whitening of the spirits, Extravagant expressions of delight, the pulse is intermittent, small & frequent, Excreting Cold &c &c.

Q. Would you employ bloodletting in Colic?

A. Yes Sir. make a strong impression with the dose of a little blood as possible, though not an inflammatory disease the bleeding is important because it will relieve the pain & relax the muscles.

Q. What do you think of Emetics?

A. They should be used in the early stage, if aided by warm water. or Colic.

Q. How would you administer the Colic?

A. The Tincture 1. Teaspoonful every 15 minutes until vomiting is produced.

Q. Do you consider this a safe medicine?

A. If it were not thousands would have suffered.

Q. What would you use as a Cathartic?

A. Purgative 47. Epsom's Salts 1 lb or manna 1 lb. 3 gills boiling water. 1/4 to be given every hour or Calomel in 30 or 40 gr. doses; or Calomel 30 grs. Dover's Powder 10 grs. or Castor oil, or Croton oil or Saltp & Cream of Tartar.

Q. What is the objection to giving Calomel in Colic?

A. You must use opiate which render the patient liable to salivation, then give it in large doses.

Q. Would you employ stimulating injections?

A. Yes Sir. Ripe Suspensive &c.

Q. There is an article that may be injected for its relaxing effect what is it?

A. Tobacco. 1/2 warm water water 1 pt. Half used at first, the other in 2 or 3 hours.

Q. What applications would you make to the abdomen and spine?

A. Emollient applications to the abdomen may be tried, then a blister 8 by 10 inches applied to the lumbar and dorsal vertebrae.

Q. Who are most liable to Colica Pictonum?

A. Persons of white Lead. Painters, Printers, & those who use water impregnated with Lead.

Q. What are the symptoms?

A. In addition to the symptoms attending other forms of Colic, there is vomiting of a dark green Bilious matter. Convulsions & paralysis &c.

Q. Where is the location of the disease?

A. In the Spinal Marrow.

Q. Will the treatment given for the last disease be appropriate in this?

A. Yes Sir.

Q. What medicine would you give to neutralize the lead?

A. Sulphuric Acid.

Q. Are there many diseases of the Liver?

A. Yes Sir.

Q. Do not some suppose the liver to be the seat of all diseases?

A. Yes Sir but erroneously.

Q. What name is given to inflammation of the Peritoneum covering the liver?

A. Acute Hepatitis.

Q. Is this term objectionable?

A. It is because there may be an inflam

inflammation of the Parenchymatous structure which is acute. And this would like wise be acute hepatitis

Q What are the anatomical appearances a Redness. Pultaceous deposits. adhesions -

Q What are the symptoms?

A The same as ~~in~~ inflammation of other serous membranes. Acute pain - in the right hypochondrium &c, the breathing is shortness & oppressed - heaving cough, rumbling pleurisy. and the tenderness to pressure may be in different parts. Urine is highly colored, and there is a jaundiced appearance

Q How would you form a diagnosis of this disease and when are the symptoms of pleurisy and pneumonia present?

A By Auscultation - percussion &c

Q What is the Treatment?

A. Strictly and vigorously antiphlogistic.

Q. What do you understand by common use of the term Chronic Hepatitis?

A An inflammation of the Parenchymatous structure of the ~~Liver~~ Liver.

Q. How is it affected?

A. It may be softened, abscess formed &c

Q. What are the Causes?

A. Injuries, blows, falls, Blows or injury upon the head may affect the liver

gastritis or inflammation of the duodenum may pass to the living - mental and moral emotions -

Q What are the local symptoms?

A A dull pain in the right hypochondrium - which is increased by pressure increased by forced respiration -

Pain in the right shoulder this however is not always present. Pain increased by lying on the left side - tumor center of the right side.

Q What is the treatment?

A. Antiphlogistic. Bloodletting general and local.

Q What are some of the general symptoms?

A. Pale. Frequent & full - face flushed, dull headache, bowels lax or costive according to the quantity of bile secreted. Skin yellow, Stomach disordered,

Q How does it terminate?

A. In resolution, Suppuration and Chronic hepatitis.

Q How is Chronic hepatitis to be treated?

A. After depletion use Calomel in small doses to produce slight salivation. Local bleeding and Punctures. And low diet.

Diseases of the skin

- Q Are these diseases numerous?
- A They are.
- Q What classification did Dr Ford adopt?
- A Willard's
- Q How many orders does he make
- A 8.
- Q What is Rubrota?
- A Measles.
- Q What are the symptoms?
- Q Where is the seat of the disease?
- Q What is the prognosis?
- Q How is measles distinguished from Scarlatina?
- Q What is the treatment?
- Q. Is bloodletting always inadmissible
- as it is said to aggravate
- the inflammation of the
- ophthalmia

Materna Medica

Q. What is *materna medica*?

A. The science that treats of medicines

Q. What is Pharmacy?

A. The art of preparing them for use

Q. What are medicines?

A. Articles which are used in the cure of diseases, and which as an ordinary result produce modification of the vital powers.

Q. What influences may modify the action of medicines?

A. age. Sex. disease. climate. mode of life. habit. idiosyncrasies. and mental operations.

Q. In what forms are medicines used?

A. In powders, pills, troches, electuaries and confections. In mixtures with solutions, in liniments. in cerates, ointments, plasters, cataplasms and vapours.

Q. What are the active forces of medicines?

A. The production of effects by the application of medicine to the living body depends on two powers or classes of force. classes of force or powers, the one residing in the medicine the other in the organism.

Q. In how many ways do bodies act on each other?

A. Three.

Q. Name them?

A. Mechanical. Chemical. & Dynamical.

Q. What are the mechanical effects?

A. The alterations of cohesion, of form, relative position &c caused by medicines are denominated their mechanical effects.

Q. What are the chemical effects?

A. They are substances having powerful affinity for organic matter when applied to the living tissues they overcome the vitality of the part and enter into combination with one or more of the constituents of the tissue. As caustics or escharotics.

Q. What are the dynamical effects?

A. Substances which exercise a most potent influence over the organism without producing any obviously mechanical or chemical changes in the organic tissue. A prussic acid

Q. ~~What~~ are the physiological effects of medicines? divided

A. Into Local & Remote

Q. What do you mean by Local

A. When a medicine is applied directly to the part

Q. How are Local remedies divided

A. Three kinds, Mechanical, chemical, and vital,

Q. What are the remote effects of medicines

A. Those which operate in parts more or less distant from that part, to which the medicine is applied.

Q. Through what medium are these remote effects produced

a. By absorption and sympathy

Q. Are medicines absorbed into the system

a. most of them are

Q. How do you know this

a. bladder has been found in the bones as well as the various secretions, in the cutaneous ducts as mercury Iodine Sulphur must &c and alcohol in the respiration

Q. How is absorption carried on

a. Some say through the medium of the venous system others through the medium of the absorbent system

Q. Which is said to be the most correct

a. The venous

Q. Why

a. Because substances can be detected so soon after they are taken into the system

Q. What is said of the parts affected by the remote action of medicines

a. The remote effects of medicines consist of alterations in the blood or in the functions of one or more organs more or less distant from the parts to which they are applied

Q. What did Dr Ferrius say relative to the Brunonian system

a. That the Laurel & Brandy bottle would not answer in these days

Q. What circumstances modify the effects of medicines

a. Two, those relating to the medicine and those

relating to the organism

1. Under how many heads are those relating to medicine included

2. Three. State of aggregation, chemical combination & pharmaceutical mixture

3. What are those relating to the organism

a. Age, sex, occupation, habit, disease conditions of the body et cetera

2. ~~What~~ ^{How} are the Therapeutical effects of medicines divided

a. Into two ways

2. What are they

a. 1st By the influence of a medicine over the causes of the disease, 2^d By modifying the actions of one or more parts of the system

2. Give an illustration of the first

a. The oil of turpentine or pink root when given for wounds

2. Give an illustration of the second

a. Tart. antimony for inflammation of the lungs or Emetics for hernia humoralis,

2. To what parts are medicines applied

a. To the Skin, mucous & serous membranes wounds, ulcers or abscesses

2. By what methods are medicines applied to the Skin

a. Empiricism, Cataplasma, Endosmum

2. What is Empiricism method of application

a. Such medicines as are applied without

as plasters, blisters, frictions, lotions
fomentations, baths & cetera

Q. What is the Cataleptic method of application

A. It is that method by which we rub
medicines into the system after having
dissolved them in their appropriate
liquid

Q. What parts facilitates the absorption
of these medicines the most easy

A. The palms of the hand, soles of the feet
near the joints, chest, back & cetera

Q. What parts of the limbs are to be preferred
are there any objections to this method
of employing medicines

A. Yes, on account of the uncertainty
of results, time required to effect the
system, local irritation produced
by friction

Q. What is the Eudermic method of
employing medicines

A. The application of medicinal agents
to the diseased Dermalis

Q. Give me an example

A. as when we apply morphia to a diseased
surface to derive its constitutional
effects

Q. To what membranes are
medicines applied

A. To the Gastro Pulmonary & urogenital
membranes

- Q. Give an example of medicines applied to the mucous membranes
- A. Colyrium. Lozenges. Elixirs, ~~chapters~~ ~~infusories~~ &c injections &c
- Q. Give an example of medicines applied to the serous membranes
- A. as injections for Hydrocele
- Q. Give an example of medicines applied to wound ulcers abscesses &c
- A. Corrosive Sublimate with the view of causing Salivation & with the view to excite local effects
- Q. What did Dr Linnæ say of the transfusion of medicinal substances
- A. That they were unsafe and extremely hazardous with the most skillfull
- Q. What classification
- Q. What did Dr Linnæ say in relation of to the Classifications of Medicine
- A. He rejects them as imperfect
- Q. Is there any objection to the alphabetical order
- A. Only in the facility of acquiring the knowledge of the properties of Medicines
- Q. What classification did Dr Linnæ adopt
- A. Woods

Treatment of Scarlatina

Large Dose of good quality
Medicine but no sugar.

Would you like
- being it a goodly lot of terminations
and being it a goodly lot of terminations

Would you like

Yes, a goodly lot of terminations
- it is short and must not be confined
to 1st stage but used throughout disease

Joseph A. Deane M.D.

Joseph A. Deane Prof of
Obstetrics & diseases of
Osteography

Our Father who art in Heaven
M D D D

To Dr. C. H. Bass
(Dr. C. H. Bass)

Dr. Charles H. Bass,
One day after d.d.

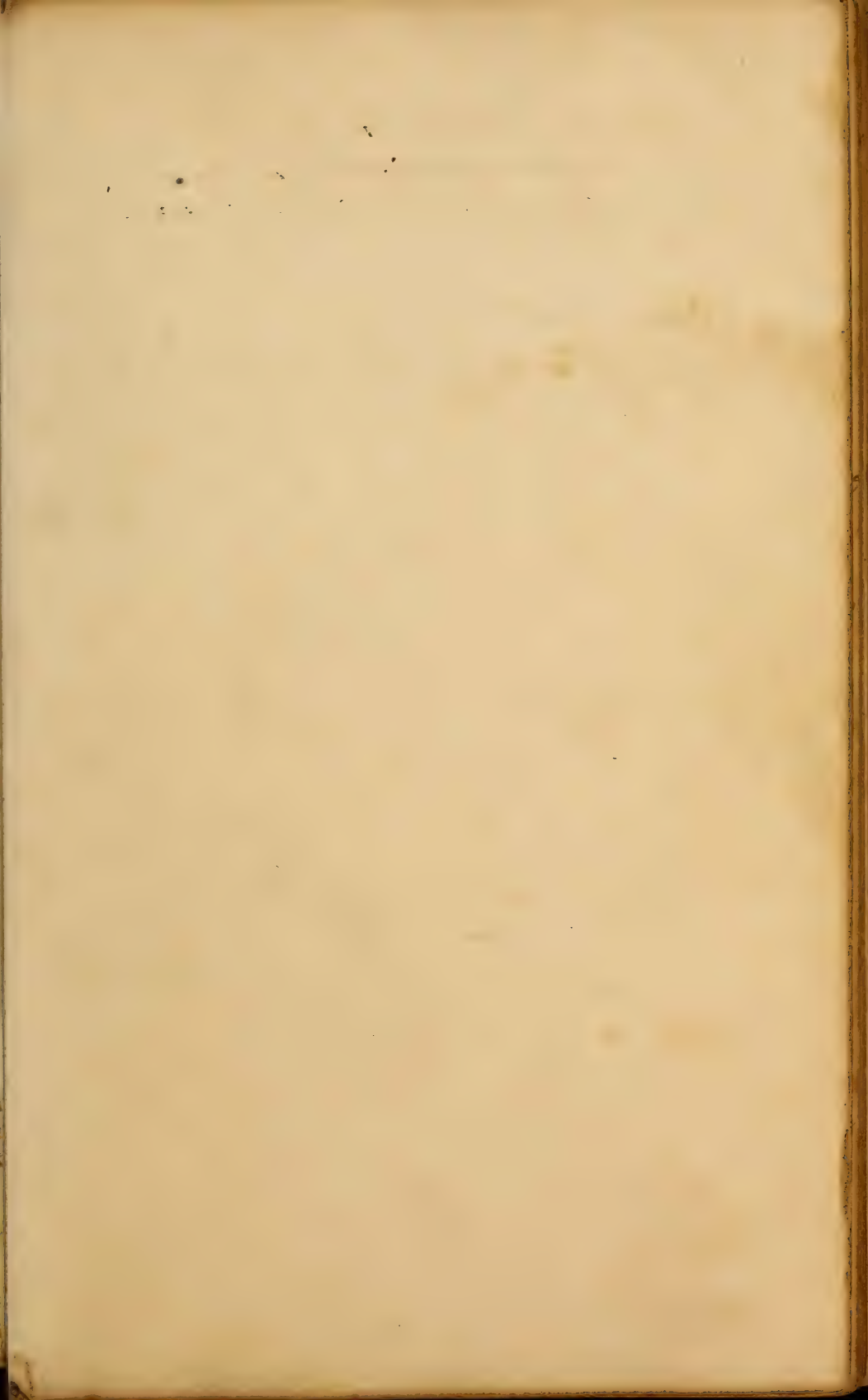
D. August 4th
Angus 20

There never was a doctor yet
that could stand the tooth ache
patiently.

Shak.

lingered
Corporal & the

What is Meningitis
Ans inflammation of the
membranes of the Brain



Dear Robert Black
Did you strike the right track
In jumping on medicine

Dear Robt. Black.
Did you strike the right track
In jumping on medicine

Susan

2

Lowell

Dr. Eves

August

Georgina

Reverend



Neur. distensions caused by
too little comexity &-

Alexander
Means

Notes on
Chemistry
taken
from
the lectures
of
Alexander Meigs A. M.
Medical
College of Georgia
August
1843-4.

What is chemistry

A - It is that science which investigates all changes which take place in the constitution of bodies, whether effected by heat mixture, or otherwise

Q - Explain the difference between Natural Philosophy and Chemistry

A - Natural Philosophy investigates bodies in masses at sensible distances and Chemistry the molecules of bodies at insensible distances

How many kinds of properties have Material substances?

A. Two. Physical & chemical

2. What science investigates ^{physical} properties?

A. Natural Philosophy.

2. How are the physical properties divided?

A. General and Secondary.

3. What are the general properties of matter?

A. Extension, impenetrability, mobility, extreme divisibility, gravitation, porosity & indestructibility.

2. What are some of the secondary properties of matter?

A. Color, fluidity, solidity, density &c.

3. Define Chemistry?

A. It investigates all the changes that take place in the constitution of bodies whether by heat, mixture or otherwise.

2. By what means are investigations carried out?

A. By Observation, Analogy & Experiment

2. What is cohesive attraction?

A. The attraction of homogeneous particles.

2. What is Chemical attraction?

A. The affinity which exists among heterogeneous particles.

2. Upon what does the form of bodies depend?

A. On cohesive attraction & repulsive dependent on the induction of heat.

2. Does Chemical attraction operate at great distances?

A. Only at insensible distances.

2. How are particles of matter divided?

A. Ultimate and integrant.

2. What is heat?

A. Sensation produced by Caloric.

2. Is Caloric material?

A. It is.

2. How is heat communicated?

A. By contact and Radiation.

2. What two circumstances are necessary to perfect conduction?

A. Continuity and the conducting power of the body itself.

2. What is conduction?

A. The passage of heat along the particles of a body.

2. Are all solids alike good conductors?

A. No Sir.

2. Do fluids conduct heat?

A. Badly, downwards hardly at all.

2. Do gases conduct heat?

A. The particles are so amobile that it is not ascertainable and beside heat is transmitted through them.

2. How is heat disposed of when it falls on a body?

A. It is reflected, absorbed, or transmitted.

2. What kind of bodies reflect heat?

A. Smooth polished surfaces.

2. What absorb?

A. Rough black bodies.

2. Are good radiators absorbers?

A. Yes Sir.

2. Are reflectors good retainers?

A. They are.

2. In reflection is the angle of incidence equal to the angle of reflection.

A. Yes Sir.

2. What law obtains with respect to intensity?

Q. It diminishes with the square of the distance.
2 How many theories of radiation of Caloric are there?

A. Two.

1. By whom are they

A. Tietz & Prevost.

2. What is Tietz's

A. That bodies of the same temperature do not radiate caloric to each other.

3. What was Prevost's?

A. That bodies at all temperatures radiate caloric

2. How is dew formed?

A. The earth or bodies on the earth radiate or send off heat so that the temperature is reduced and thereby the moisture of the atmosphere is condensed on the earth or these bodies on or near the surface

2 Why is there no dew when there are clouds?

A. The clouds reflect back the heat, and prevent the cooling process.

2 What is the degree of heat 35 miles from the surface downwards?

A. Sufficient to fuse iron.

3. Is heat transmitted?

A. Yes Sir

2. What are bodies called which transmit heat

A. Diathermous.

2. Does it expand bodies?

A. It does in all directions

2. What rule have you for ascertaining the amount of expansion?

A. Multiply the expansion in length by 3 & you will have it, nearly.

2. Do solids and fluids expand equally under the same degree of heat

A. No Sir. Fluids expand more than solids

3. Do fluids and gases expand equally under the same heat?

A. No Sir gases expand more than fluids

3. Do all fluids expand equally under the same heat.

A. No Sir. Ether more than alcohol. alcohol more than water, ^{water} more than mercury.

4. What is the ratio of expansions between Glass and Platinum?

A. Glass twice as much as much as Platinum

5. What instrument is constructed on this principle

A. The grid iron pendulum. or compensating pendulum.

6. Is the expansion of Mercury uniform?

A. More so than other fluids.

7. What is Freezing Point?

A. 32° of Fahrenheit generally.

8. Does an increase of volume take place when water freezes?

A. Yes Sir.

9. At what angles do particles of water arrange themselves in arrangement of freezing?

A. 60° and 120° .

10. Do all gases expand equally under the same heat

A. They do.

11. What is the increase of volume of all gases for each degree of heat of Fahrenheit above 32° ?

B. $\frac{1}{400}$ of the whole volume.

Q. Can you then tell the amount of expansion of volume if the degree of heat is known?

A. Yes Sir.

Q. How is atmosphere affected by heat?

A. It expands its specific gravity becomes less & consequently it ascends.

Q. When air ascends what then occurs?

A. The cold air rushes in to supply its place.

Q. Is this the Cause of winds?

A. Yes Sir.

Q. Can you account for the land & sea breeze.

A. Yes Sir. During the day the Sun heats the land more than the sea. Consequently the atmosphere of the land ascends being rarified, and the air comes in from the sea. During the night or after the Sun begins to lose its effect the earth then radiates heat faster than the water becomes of a lower temperature, and the air passes off to the sea.

Q. Should a barometre be high or low?

A. Low.

Q. How should a chimney be built?

A. - - - - -

Q. What are thermometers?

A. Instruments that measure the comparative degree of sensible heat.

Q. Of what was the first constructed?

A. A glass tube with a bulb of air.

Q. What is generally used for constructing this instrument?

A. A glass tube with bulb of uniform size & mass (care)

3. What is the object of the Self Registering thermometer?

A. To indicate the greatest degree of heat in a given time or the opposite.

Q. What is the object of a pyrometer?

A. To measure high degrees of heat

Q. Whose is the best?

A. Professor Daniell's.

1st December 1843.

2. What is the difference between the capacity of heat and specific heat?

A. The capacity of heat is the capability to contain a certain amount of heat. Specific heat is the power of the body to contain heat.

Q. What is latent heat?

A. The insensible heat of a body.

Q. When a substance passes from a solid state to a fluid is the latent or the specific heat increased?

A. It is.

Q. How is the surrounding temperature effected?

A. It is diminished on account of the absorption of heat.

Q. Is the same effected when a fluid becomes a gas?

A. Yes Sir.

Q. Do all bodies then have different amounts of specific heat?

A. Yes Sir.

Q. How do you account for that fact?

A. It may be on account of the partic-

ular arrangement of the particles or molecules composing different bodies.

Q. How is the temperature affected when snow is forming?

A. It is increased.

Q. Why?

A. Because the heat that held it in the form of vapor is now driven out by condensation.

2. Upon what does liquefaction depend or what produces it from a solid?

A. The repulsive power, heat, must so far overcome cohesion as to permit the particles to move freely on each other.

Q. What amount of heat does it require to liquify Ice?

A. One hundred & forty degrees.

Q. What is that heat called?

A. The heat of fluidity.

3. How is liquefaction generally produced?

A. By the introduction of heat immediately.

Q. May it be produced otherwise?

A. It may as in freezing mixtures. owing to the strong affinity one substance has for another.

2. How is vaporization divided for study?

A. Evaporation and Eruption & ebullition.

3. How ebullition generally produced?

A. By the application of heat.

3. What is the boiling point of water?

A. 212° of Fahrenheit when the Barometer is at 29.8.

Q. Do different substances boil at different

Temperatures

A. Why?

Q. Does the Pressure of the atmosphere have any influence on the point of ebullition?

A. Yes Sir.

Q. If the Pressure be diminished what effect does it produce?

A. Water will boil at a much lower temperature, and so will any other fluid.

Q. Is the evaporating process a cooling one?

A. It is.

Q. Why?

A. Because when a fluid assumes the form of vapor its capacity for Caloric is increased consequently it absorbs heat from surrounding bodies.

Q. Upon what does evaporation depend?

A. Generally upon heat.

Q. Is there an exception to this general law?

A. It would seem that spirits of Turpentine form an exception, for its boiling point is much higher than that of water, yet it evaporates much more rapid under the same circumstances.

Q. What are indispensable for the production of Evaporation?

A. Heat and moisture.

Q. What are some of the practical benefits of Evaporation?

A. The formation of snow. Drying of things is carried on by it. The human system is freed from the effects

Two effects of intense heat.

2. What temperature has been borne by individuals in a dry room?

A. 262° of Fahrenheit and it said the Owen girls of Germany sustain for 3 minutes more than 300° of heat.

3. What is distillation?

A. A species of evaporation?

3. How may it ~~now~~ be illustrated?

A. Put in Florence flask alcohol & water insert in its mouth a fixed tube which communicates with another similar flask. Surround by a cold fluid. then apply gentle heat to the first and the alcohol will pass over and be collected in the second vessel.

3. Is motion a common phenomenon in nature?

A. Yes Sir it is observed everywhere.

3. How does atmosphere press with respect to direction?

A. It presses in all directions with equal force.

3. How can you illustrate this fact?

A. If vessels of any shape be used it is observed that a fluid will be maintained at the same height.

2. Is steam employed for effecting any practical ends?

A. It is

2. Name some one?

A. It is the great agent in propelling the

12. Heat. — Light

Steam engine, in its various Connections
Q. How is steam made use of, or how does it operate upon machinery?

A. By its Condensibility and Expansion.

Q. Who was the first that applied steam to machinery?

A. Huro. Wro. A.C.

Q. Who was the first that discovered the Condensation of Steam?

A. Papin.

Q. What kind of a machine was Newcomen's?

A. Strictly atmospheric.

Q. Who brought the steam engine to its present perfection?

A. John Watts.

Q. How many sources of heat are there?

A. Six. Seven.

Q. Name them?

A. The Sun, Combustion; Chemical action, Condensation⁴ of gases. Condensation³ of solids. Electricity. Animal heat.

Q. Is Light material?

A. It is. Says Prof. Meuss.

Q. How many theories are there?

A. Two.

Q. By whom are they?

A. Des Cartes & Sir Isaac Newton

Q. Which is the oldest?

A. The Cartesian.

Q. What is the Cartesian theory?

A. It is: Light is immaterial, and it is manifested by the vibrations of a luminous

Light

13

iferous ether supposed to exist through out the universe and these vibrations are produced by luminous bodies.

2. What is the ether.

A. The Newtonian. It holds that light is material. And it consists of infinitely small particles thrown off from the sun and other luminous bodies in all directions.

3. Which is the more simple?

A. The Newtonian.

3. Does it account for all the phenomena

A. It does and for many more satisfactorily than the other.

2. What are the manners in which light is disposed?

A. It is Reflected. Transmitted. or absorbed.

3. What kind of surfaces reflect light?

A. Bright polished surfaces.

3. What kind transmits light

A. Those that let the rays pass in such a manner as to give a clear view of objects on the opposite side from the observer.

3. What kind of bodies absorb light?

A. Those that do not reflect nor transmit.

3. Can a body that absorbs light be seen?

A. No Sir.

3. Is black a color?

A. It is not.

Q. What are translucent bodies?

A. Those that transmit light enough to distinguish the presence of a body without a distinct view of the outline.

Q. What is a Ray of light?

A. The line along which the particles of light pass.

Q. What is a beam?

A. A number of parallel rays.

Q. What is a pencil?

A. A number of converging or diverging rays.

Q. Is light interrupted in its direction in passing through different media?

A. It is.

Q. And is that called?

A. Refraction.

Q. Do all bodies refract equally?

A. No Sir.

Q. What law is observed in the refraction of light?

A. The sine of the angle of incidence holds a uniform proportion to the sine of the angle of refraction.

Q. Has density influence over refraction?

A. Generally the most dense bodies possess the greatest refracting power.

Q. But is there not an exception to this law?

A. Yes, Sir.

Q. What is.

A. The most inflammable substance.

Light - Electricity

15

are the best refractors.

2. Has this property light any thing to do with vision?

A. It has. The humors and the crystalline lens are for refracting the rays of light so as to form a focus on the retina.

3. What is the reason some persons are near sighted?

A. The Crystalline lens is too convex

Q. How Can this be obviated.

A. By double concave lenses.

3. Does the opposite obtain in aged persons.

A. It does.

2. How many colors are there in the Spectrum.

A. Seven. Red. Orange, ² yellow, ³ green, ⁴ Blue, Indigo, Violet.

Electricity

2. From what is the term derived?

A. From a Greek word. *electron*.

3. What substance first exhibited electric phenomena.

A. Amber.

2. How many theories are there?

A. Two.

2. By whom are they?

A. Du Fay & Franklin

3. What is Du Fay's?

A. That there are ^{two} fluids. A positive and negative. Or vitreous & Resinous

16 Electricity

Q. Why is the distinction of vitreous and resinous made.

A. Because one is excited upon glass and the other upon Wax resin &c.

Q. What is Franklin's

A. That there is but one fluid, and the two phenomena ^{are exhibited} when the quantity is in excess.

Q. Does he employ the terms vitreous & resinous?

A. No Sir. He expressed the condition

of bodies by the term positive & negative.

Q. Can electricity be excited on all ~~the~~ substances?

A. No Sir.

Q. What are those substances called upon which it may be excited?

A. Electrics.

Q. Name some electrics.

A. Glass. Resin. fur. &c

Q. Are electrics, Conductors.

A. They are not.

Q. Are non electrics, Conductors

A. They are.

Q. Then can electricity be excited upon a conductor?

A. No Sir.

Q. Describe a Leyden Jar.

A. It is generally a glass vessel coated with tin foil within and without & within about two inches of the top.

Electricity

17

why the glass is left for or coated with wax and varnished and there are a brass rod & chain passing down and continue to the inner coating.

Q. How would you charge this Jar?

A. By inserting the rod very near to the positive Conductor of the machine.

Q. Would you expect to charge such a Jar if it were insulated?

A. No Sir, there must be a communication with the great reservoir, the earth.

Q. Is electricity like Caloric repulsive?

A. Bodies in like Conditions. That is two in a positive state, or two in a negative state repel each other.

Q. Will bodies in unlike states repel, or attract each other?

A. They attract.

Q. What is an electroscope?

A. An instrument that detects the presence of Electricity.

Q. What is an electrometer?

A. An instrument that measures the degree of Electricity.

Q. Name the Causes of Electricity?

A. Friction, Change of temperature, Chemical action, Contact, Change of form, Induction.

Q. Upon which of these is the Leyden jar charged?

A. Induction.

Q. Does Professor Mead think Franklin's

Electricity

theory the simpler and therefore the better?

A. Yes Sir.

B. Who first identified the lightning of the heavens to be the same with the electricity excited on the machine?

A. Dr Franklin.

2. Why is a spark seen when electricity passed from the prime Conductor to a pointed Conductor?

A. Because the rapid passage of the fluid condenses the atmosphere before it & the spark is manifested as in the Condensing syringe.

3. How far will the spark leap?

A. Generally not more than six inch or two.

3. May electricity be conducted off silent by?

A. It may if a point be presented.

3. What distance will the fluid leap to a point.

A. From one to two or 3 or even four feet under certain circumstances.

3. Will the point be luminous?

A. Yes Sir. Having a stellated appearance.

2. Why did Professor Mead ~~not~~ fail in some of the experiments?

A. The machine would ^{not} generate a sufficient quantity of electricity.

B. And upon what did that depend?

A. Upon the imperfections of the machine and the moisture of the room.

Electricity - Magnetism (19)

2. How do you account for thunder?

A. The electricity in passing from one cloud to another or to some one body separates the atmosphere and the sudden rush of the waves of atmosphere together produce the sound of thunder and the difference of sound depends upon the direction of the lightnings tracts.

3. What is the reason that there is some times lightning without thunder.

A. The body from which the fluid ^{passes} may not be much excited above the other - & again the atmosphere is far more rare when this phenomenon occurs.

4. What the Cause of Aurora Borealis found in the same?

A. Nothing more satisfactory is yet known.

Magnetism

1. Are all magnets natural?

A. No Sir they may be made artificially.

2. What is a magnet?

A. A body is said to be magnetic when freely suspended one pole points north while the other points south. and when it will attract and keep another metal in contact with it.

3. Is magnetism produced by induction

A. Yes Sir. if a large magnet be suspended by the south extremity. it will hold in contact a soft piece of soft iron & the end in contact will be negative or south.

30. Magnetism Galvanism

and the other north and the same u-
rals may be in a number of pieces.
Q. Are there currents which pass round
all magnets?

A. There are.

Q. Are there currents that pass round
the earth?

A. There are. and the currents pass
in reference to each other as two cyl-
inders when rolling together

Q. May the direction of the needle be
changed by a current of magnetism

A. Yes Sir. It will assume such posi-
tion as to make the currents parallel

Galvanism

Q. From what ^{word} does it take its name?

A. From Galvani. the discoverer

Q. How many theories are there?

A. Four.

Q. What are they?

A. One by Volta. that is produced by con-
tact of metals. and the fluid only con-
ducts the galvanism. One by Voltae-
tion. that it is produced by chemical
action. one by Davy. that it is begun
by contact and kept up by chemical
action. And the last is the Chemical
Polar theory. dependent upon induction

Q. Whose Battery is generally used?

A. Cruikshanks with Dr. Mares
modification.

Q. What materials are employed?

Galvanism - Specific Gr^{ty}.

Q. Give Copper and an acid diluted.

Q. What kind of battery has the greatest fusing power?

A. One with few large plates.

Q. What metals does it means fuse?

A. Gold and silver.

Specific Gravity.

Q. What is specific gravity?

A. It is the weight of a body compared with some other body as a standard.

Q. What is the standard for solids & liquids?

A. Water.

Q. How would you ascertain the specific gravity of a solid?

A. Weigh it ⁱⁿ the air then weigh it ⁱⁿ water and divide the ~~loss of~~ weight in air by the loss in water.

Q. What instrument is employed?

A. Nicholson's gravimeter.

Q. What instrument is generally used to ascertain the specific gravity of fluids?

A. Hydrometer.

Q. What is the standard for gases?

A. Atmospheric air.

Q. What is the rule?

A. The weight of any quantity of air is to the weight of the same quantity of ^{the} gas to be determined as one is to the specific gravity of that gas.

23. Nomenclature

Q. Who formed the present nomenclature?
A. Lavoisier, Berthollet, Gay-Lussac & Berzelius.
Jan 7th / 53

Q. From what does oxygen take its name?
A. From oxen. acid & generated to generate.

Q. What is an oxide?

A. A combination of oxygen with a base - but the oxygen is not sufficient to manifest acid properties.

Q. What termination signifies the least degree of acidity?

A. ous.

Q. What the highest commonly?

A. ic.

Q. What terms are prefixed to express a still higher or lower degree.

A. super. hypo.

Q. What do ite & ate signify?

A. A salt formed by an acid in one end ite - & one ate from ic.

Q. What does ure signify?

A. A salt formed by a non-metallic radical with a base.

Q. What does dis signify?

A. Two proportions of a base.

Q. What is base? Basis.

Q. How many degrees of Oxidation?

A. A number - the protoxide. Bi-ter. &c. the peroxide is the highest and there are sesquioxides.

Affinity

23

2. Can you define it?

A. No Sir.

3. How does affinity act?

A. On atoms - heterogeneous atoms - at insensible distances.

Q. Is attraction equal between the particles of all bodies?

A. No Sir

2. How many kinds of affinity are there?

A. Two simple & Double

2. How does simple affinity act?

A. Upon the particles of simple substances or upon the particles of one simple & one compound.

2. Give an instance of each?

A. 1. Sulphuric acid & water. 2. Sulphate of magnesia & lime. The acid lets go the magnesia and takes the lime.

3. What circumstances destroy mechanical mixture?

A. Filtration. Rest & Agitation.

2. Is the power of attraction the same under all circumstances?

A. It is not. Substances in powder unite more readily than large masses. & solutions more than powders.

2. Are changes produced by chemical action?

A. Yes Sir. Changes in properties - in density - Temperature - Form. Color.

3. What has to be overcome by chemical attraction?

Affinity

Q. Cohesion. But in this attraction is assisted by mechanical action, heat, effluvia, &c., elasticity, quantity of matter, gravity - the insupportable weight -

Q. Give an instance of double affinity?

A. Combination of compounds water and carbon

Carbonic acid Ammonia
Hydrochloric acid Lime

Q. Do substances unite in definite proportions?

A. Not always.

Q. How is the division made with respect to proportions?

A. Bodies that unite in few - and those that unite in many proportions.

Q. Do not some unite indefinitely?

A. Yes Sir and they are included in the latter class.

Q. When substances unite in certain proportions are these invariable?

A. They are.

Q. Give an instance of an isomeric body

A. Etherine.

Q. How is it formed?

A. 400 of Hydrogen + 400 of Carbon. which is the same proportion that forms Olefiant gas. 200 of each.

Q. Upon what does the law of equivalents depend?

A. Upon the atomic theory.

Q. Do substances unite by volumes?

A. They do. And this law is invariable.

Oxygen.

25.

Q. By whom was Oxygen discovered?

A. Dr Priestly 1774. By Scheele 1775.

Q. Give its physical properties?

A. Transparent. Inodorous. Colorless. Refracts light but little.

Q. From what is it obtained generally?

A. Any compound that contains it in large quantities. Nitrate of potassa. Chloride of soda.

Q. What is the specific gravity?

A. 1.111.

Q. Its equivalent?

A. 8.

Q. Is it generally diffused and of much importance?

A. It is.

Q. Is it inflammable?

A. No sir. But a supporter of Combustion.

Q. What effect has it on the human system?

A. Acts through the lungs on the Circulation exciting it.

Q. Is it ever applied as a remedy?

A. It is. And in some instances palliates disease.

Hydrogen

Q. Discovered by whom?

A. Cavendish 1766.

Q. What are its properties?

A. Colorless. Transparent. Refracts light six times as much as air. & is the lightest body known.

26. Hydrogen, Hydrogen.

1. From what is it procured?

A. Generally by the action of dilute Sulphuric Acid on the zinc of Commerce.

2. What is the strength of the acid?

A. One part acid to 8 of water.

3. What is the arrangement by which it may be obtained from the articles mentioned

A. Take a common jug with a cork stopper through which pass a tube to near the bottom of the vessel by which the acid is introduced; have another tube fixed which communicates with the Cistern under the water. through this tube the gas passes into a receiver.

4. What is the specific gravity of Hydrogen?

A. About 0.7

5. Is it combustible?

A. More than any substance known.

6. Is hydrogen a light substance?

A. Very the lightest known

7. How is it proved?

A. By the bubbles formed by soap-buds & hydrogen; they rise rapidly.

8. Does the Oxy. Hydrogen blow pipe give great heat?

A. Yes Sir.

9. Will it fuse the metals?

A. It will. even platinum.

10. By whom was this instrument constructed first?

A. DeHaro.

11. What is the Arcumond Lights?

A. Nothing more than the Dry Hydrogen blow pipe. Acting upon the Carbonate of Lime.

B. Are various sounds produced by burning Hydrogen in tubes?

A. Yes Sir.

C. Is Water formed by the Combustion of Oxygen & Hydrogen?

A. It is.

D. What is the Philosopher's Lamp?

A. An arrangement by which Hydrogen is generated and burnt constantly.

2. How did Professor Maudslayi prove the inflammability of this gas with oxygen?

A. By putting pure hydrogen in a vessel with a small orifice through which the gas escaped. And when ignited it burned quietly till the oxygen entered in sufficient quantity to produce an explosion, when a considerable report was made.

3. What is water?

A. An oxide of Hydrogen, or a compound of Hydrogen and Oxygen.

4. In what proportion?

A. 2 of Hydro to one of Oxy.

5. Is water of much importance?

A. It is.

6. Name some of its uses?

A. It is the great solvent - ^{the} means by which dissolving is effected - produces steam -

7. Can water be compressed?

A. Not at all perhaps.

Nitrogen

Q. How much does water expand to
frozen steam.

A. 1725 Times or more, say 1800.

Nitrogen

Q. From what is it most commonly
obtained?

A. Atmospheric air.

Q. How.

A. By burning phosphorus in a confined
vessel of air.

Q. What proportion of ^{air} Nitrogen is it
in.

A. $\frac{4}{5}$

Q. When was Nitrogen discovered?

A. 1772.

Q. By whom?

A. Rutherford.

Q. What are its properties?

A. They are little known, being passive or
negative.

Q. What was formerly called
a Azote.

Q. Does it enter into the formation of
plants?

A. Yes Sir.

Atmospheric Air

Q. How high does it extend?

A. About forty five miles

Q. Is it elastic?

A. Very.

Q. Has air any color?

A. In large bodies it presents a bluish

Protoxide of Nitrogen

appearance. owing perhaps to the vapor in the air.

Q. What is the weight of a column of air 15 pounds to the square.

Q. To what height will a column of air support a column of water, or mercury?

A. Water 34 ft. Mercury 30 inches.

Q. Is the pressure of the air invariable?

A. It is not.

Q. Which are the denser portions?

A. The lower.

Q. What is the proportion of the density

A. The density diminished in geometrical proportion as the distance from the earth increases arithmetically.

Protoxide of Nitrogen

Q. By whom was the protoxide of Nitrogen discovered?

A. Dr Priestley.

Q. What did Lavoisier call it?

A. Nitrous oxide gas.

Q. From what is procured?

A. Nitrate of ammonia most conveniently.

Q. What is produced by the gas, when it is obtained from Nit Ammonia?

A. Water.

Q. Is it absorbed in recently boiled water?

A. About its own bulk at 60° .

Q. Does it support Combustion?

A. It does.

Q. Does it affect the system when breathed?

A. It does. From which circumstances

30. Binovide of Nitrogen

it has been called the laughing or intoxicating gas.

Q By whom was the binovide of Nitrogen discovered?

A. By Dr. Hales. but Dr. Priestley first investigated it.

Q How was it obtained?

A. By the action of nitric acid on the diluted on Copper or mercury.

Q What effect has oxygen gas on this gas when mixed with it?

A. Forms it orange colored nitrous acid fumes or vapor.

Q Does it support Combustion?

A. Fully.

Q Is it respirable?

A. No.

Q What is its specific gravity?

A. 1.0375.

Q. How may the hyponitrous acid be formed.

A. Add to 400 measures of binovide of nitrogen 100 of oxygen both being quite dry and expose the fumes thus formed to cold at 0°.

Q. Does it exist in a natural state

A. Not under ordinary circumstances.

Q. In what conditions does nitrous acid exist?

A. In liquid or solid form.

Q. How does it effect the skin?

A. Produces a yellow hue. it is corrosive.

Nitric Acid

31.

- Q. When was it discovered?
- A. In the 13th Century. By Sully.
- Q. Who afterwards investigated its properties?
- A. Cavendish.
- Q. Does nitric acid exist in an unaltered state?
- A. It does not.
- Q. What is its common name?
- A. Aqua fortis.
- Q. How is it procured?
- A. The action of Sulphuric acid upon Common salt petre. aided by heat.
- Q. What is left in the retort?
- A. A bisulphate of Potassa.
- Q. What is the specific gravity?
- A. It varies from 1.3 to 1.6, according to manner ⁱⁿ which it is obtained.
- Q. What may be said with respect to its color?
- A. When pure it is colorless. generally it is tinged with the various acid hues.
- Q. At what temperature does it boil?
- A. 248° of Fahrenheit. The strongest acid freezes at 50° below zero.
- Q. What is the strength of the common aqua fortis of the shops?
- A. $\frac{1}{4}$ of the pure acid.
- Q. What the double?
- A. $\frac{1}{2}$ the pure.
- Q. Does it oxidize metals rapidly?
- A. It does.
- Q. How does it affect vegetables?
- A. It decomposes them, and also animal matter.

33. Carbon

Q. Is it employed as a test?

A. In many instances, as for gold, uric acid &c.

Q. Does carbon exist in a pure state?

A. Rarely.

Q. How does it exist?

A. In gas, in the form of Coke, Plumbago, Charcoal, & Diamond. And then it combines with a number of bases forming Carbonates.

Q. How is its absorbing power?

A. Very great.

Q. How much Ammoniacal gas will it absorb?

A. 90 times its volume.

Q. What gases does it absorb most readily?

A. The least elastic.

Q. What is the specific gravity of the diamond.

A. 3.50.

Q. What is it? Pure Carbon of a crystal and form.

Q. Is there any lead in what is called Black lead?

A. No Sir

Q. What are some of the properties of Carbon

A. It is combustible, a bad conductor of heat, a good conductor of electricity, does not support respiration, it is antiseptic, & destroys vegetable Matter.

Q. With Oxygen what does it form?

A. Carbonic oxide & Carbonic acid.

2. By whom was the Carbonic acid discovered?

a. By Dr Black, in 1757.

2. How can it be procured?

a. By the action of dilute hydrochloric acid on marble.

2. Specific gravity is what?

a. About 1.52.

2. Is this gas extensively diffused?

a. It is.

2. From what is the Carbonic oxide gas obtained?

a. From the action of Sulphuric acid on Oxalic acid.

1817

2. In what proportions?

a. One of Oxalic acid to 5 or 6 of Sulphuric acid.

2. How is the gas freed from the Carbonic acid?

a. By lime water.

2. What is the sp. gravity?

a. 97.

2. Is it respirable?

a. It is not.

2. With what kind of flame does it burn?

a. A blue flame.

2. Is it explosive with Hydrogen or Oxygen?

a. Slightly.

2. By whom was it discovered?

a. By Priestly, and examined by Berthollet.

24. Sulphur.

Q. Where is sulphur found in largest quantities?

A. In the neighborhood of volcanoes.

Q. Is it a conductor of electricity?

A. It is a non conductor.

Q. What is its specific gravity?

A. 1.99.

Q. What is the point of fusion?

A. $216^{\circ} F$.

Q. What is its condition at about 428° ?

A. Becomes thick & tough.

Q. Does it become fluid again at a higher heat?

A. Becomes fluid again.

Q. Is it volatile?

A. It is.

Q. What is Brim Stone?

A. Common sulphur fused & poured in molds.

Q. What is the flowers of sulphur?

A. The sulphur sublimed.

Q. What is the equivalent number?

A. 16.

Q. Does the vapors unite with other vapors?

A. It does, as with alcohol.

Sulphurous acid.

Q. From what is it obtained, and how?

A. By the action of sulphuric acid on Mercury.

Q. What is the result?

A. The mercury takes up a portion of

Sulphuric Acid

oxygen of the sulphuric acid.

Sulphuric Acid

2. From what is it obtained in Germany.

A. From the Sulphate of the Protoxide of Iron by the application of heat.

2. From what in the U. States.

A. Sulphur and Nitrate of Potasse.

3. How is the process conducted.

A. These articles are thrown upon a furnace so arranged as supply air for the flame and enough of oxygen to the substances on the furnace to form the nitrous acid and sulphurous acid. which are conducted into a chamber the floor of which is covered with water, which generates a vapor in the chamber where these gases exist. Now the nitrous acid gives up one portion of oxygen which forms sulphuric from the sulphurous & then hyponitrous, the sulphuric acid & one portion of water form a crystalline compound which falls down and gives the sulphuric acid to the water. leaving the hyponitrous acid free. But as it will not remain in that state, if there be another portion of the same they will form one particle of nitrous acid & one of the bioxide of nitrogen. and its specific gravity less than air it rises and takes oxygen from the air forming nitrous acid which gives oxygen to the sulphurous acid as above mentioned and thus the process is continued till the water is saturated

36. Phosphorus

Q. How is the acid obtained?

A. By distillation in a platinum vessel.

Q. What is equivalent number?

A. 40.

Q. The Specific gravity?

A. 1.842. to 1.850.

Q. At what temperature does it boil

A. 620° .

Q. Does Sulphuric acid unite with many substances?

A. Yes Sir. ~~Phosphorus~~ Phosphorus.

Q. When discovered & by whom?

A. 1669 By Brandt.

Q. From what is commonly obtained

A. From bones —

Q. What degree of heat fuses it?

A. 108° .

Q. Is it inflammable?

A. Very.

Q. How does it behave in contact with Sodium?

A. Produces rapid Combustion.

Q. Does Phosphorus unite with any substances of its own class.

A. It unites with Sulphur.

Q. Does it unite with hydrogen?

A. It does.

Q. What are some of its Compounds formed with oxygen?

A. Oxide of Phosphorus. Phosphorous acid
Phosphoric acid. &c &c.

Chlorine

37

Chlorine

Q. When discovered & by whom?

A. 1774 by Scheele.

Q. From what obtained from?

A. Action of hydrochloric acid on the Peroxide of manganese -

Q. What is its physical properties?

A. It is a green yellowish color. supports combustion changes the flame to a livid color. changes vegetable colors. produces combustion with the metals as gold. Ruthenium & arsenic.

Q. Is this gas respirable?

A. Not at all.

Q. What is the specific gravity of Chlorine?

A. 2.50.

Q. What compound does it form with hydrogen?

A. The hydrochloric or muriatic acid.

Q. What name does Davy use?

A. Chlorohydric Acid.

Q. How is the gas obtained?

A. By applying heat to the fluid.

Q. Is the gas absorbable?

A. Water will absorb 480 times its volume.

Q. What is its specific gravity?

A. 1.38.

Q. When discovered

A. 1772.

Q. Is it respirable

A. No Sir.

3 What does it form when ammonia is present?

A. Hydrochloride of Ammonia

2 How and from ^{what} is most commonly obtained?

A. Chloride of Sodium & Sulphuric acid

2 Does this acid when pure act upon gold?

A. No

3 Does it corrode the metals generally

A. It does

Combinations of Oxygen & Chlorine

2 What is the first?

A. Hypochlorous Acid or Euchlorine

2 When & by whom discovered

A. 1811. By Davy

3 From what obtained

A. Chlorate of Potassa acted on by ~~Sulphuric~~ acid. gentle heat applied

C. What is its specific gravity?

A. 3.02.

2 What is the next combination?

A. Chlorous acid.

C. How is made?

A. Take 50 or 60 grs Chlorate potassa rub it up into a paste with Sulphuric acid. put it in a small glass uton and apply heat. which be kept below 200° .

C. Are its properties similar to the first

A. They are both as combustible.

C. Is there a Perchloric acid

A. Ces. Lin. Sodium

1. When discovered? ~~1770~~

a 1812. By Courvoisier

2. How produced?

a From an impure Carbonate of Soda called Kelp.

3. What is its form.

a Crystalline

3. What is its lustre

a Metallic.

3. How does it behave under heat?

a A heavy vapor is formed which after some crystallizes

3. What is the specific gravity?

a 4.99

3. What is the sp. gr of its vapor?

a 8.7

3. Is the vapor produced by the action of warm sulphuric acid upon it?

a Ces. Lin.

1. Where is it generally found?

a In several marine substances.

2. How does it affect metals?

a Corrodes them.

2. Under certain circumstances does it give a great variety of color?

a It does.

2. What is the test of Sodium.

a Starch.

3. What is the color of the precipitate?

a Blue.

Q. Take the Iodate of Potassa in solution what kind of precipitate will it form with lead?

A. Yellow.

Q. What with mercury

A. Red.

Q. What the nitrate Silver

A. Pale yellow.

Q. Does Iodine unite with many substances?

A. Yes Sir.

Q. If Iodine and phosphorus be placed together what takes place?

A. Rapi'd Combustion

Q. What is potassium be used in the fusion of phosphorus?

A. By the application of heat the Combustion takes place.

Q. What is hydriodic acid?

A. A compound of Iodine and hydrogen

Q. Are the oxide of Iodine and Iodous acid the same.

A. The Iodous acid contains more oxygen

Q. Name some other combinations of Iodine and oxygen?

A. Iodine. Iodic. & per iodie acids

Q When and whom discovered?

A 1826 by Balard.

Q. What substance does it resemble most?

A Chlorine

Q. In what form does it exist in sea water?

A Bromide of Sodium

Q At common temperatures what is its form?

A. Liquid.

Q What is sp. gr.?

A. 3.

Q What kind of vapors does it give off?

A. Like nitrous acid.

Q Does it conduct electricity?

A. No Sir

Q Does the vapor explode with any substance?

A. Antimony and Potassium. &c the flame is greenish or green.

Fluorine

Q Has Fluorine ever been obtained in a free state?

A It has not.

Q. What does it form with hydrogen?

A Hydrofluoric acid.

Q From what is it obtained?

A. By the action of Sulphuric acid on pulverized Fluor Spar. the process should be carried on in leaden retort.

Q What are some of its properties?

A. Powerfully acid - pungent to the taste - acts vigorously on glass. forming the fluoboric acid - acts on metals (some) and on the alkalies - forming salts or ~~compounds~~

42. Norow = Ammoniacal gas.

Q From what is Fluosilicic acid?

A From the action of Sulphuric acid on pulverized Fluor spar and glass gently heat being applied.

Q. What are some of its properties?

A. Colorless, irrespirable & corrodes glass. Sp. gr. 1.361.

Norow

Q. What substances does it resemble.

A. Chlorine. Bromine. Sulphur

Q What is its principal combination
A Boric acid.

Ammoniacal Gas.

Q. What did Dr Priestly call it?

A. Alkaline air.

Q What are the constituents of this gas?

A. Nitrogen & hydrogen -

Q Is it absorbable?

A. Very -

Q If this gas is absorbed by distilled water as long as the water will take it up what is it called?

A. Aqua Ammonia.

Q How is it obtained commonly?

A. By applying heat to Aqua Amm.

Q With what gas does it form a solid

A. Hydrochloric acid gas.

Q What is the compound?

A. Hydrochlorate of ammonia.

Q Has it alkaline properties

A. It has.

Q What is its sp. gr.?

Hydrogen and Sulphur 48.

A. 587

Sulphuretted Hydrogen -

1. What is its chemical name?

A. Hydrosulphuric acid gas.

2. How is it formed?

A. From the disengagement of Antimony with 4 or 5 times as much Hydrochloric acid.

3. Give some of its properties?

A. Colorless. odorous like rotten eggs. -
Insoluble in water & odor. insupportable -

4. Is it ever used as a test?

A. It is.

5. What kind of precipitates does it generally give?

A. Brown or black brown.

6. What effect has it upon sugar of Lead?

A. Turns it brown.

7. Does this gas exist in nature?

A. Extensively. it is generated in the putrefaction process of animal & vegetable to some considerable degree Carbon & Hydrogen.

8. Do these substances form many compounds?

A. Yes Sir

9. Which were particularly described by Prof. Meuss?

A. Light Carburetted hydrogen and Olefiant acid or Bicarburetted Hydrogen

10. What are the proportions of this compound?

44. Carbon and Hydrogen

Q. 3 of Hydrogen and 1 Carbon.

Q. What are its properties?

A. Colorless. absorbable by water - $\frac{1}{10}$ of its volume - Extinguishes flame, inflammable - and detonates with O_2 by the Electric Sparks.

Q. In what localities is this gas generated in large quantities?

A. Coal mines

Q. What is it called in the mines?

A. Fire damp.

Q. Who examined this gas first thoroughly?

A. Davy.

Q. What instrument did he invent to prevent the explosion of this gas when flame is carried in mines?

A. Davy's Safety Lamp.

Elephant or Bicarbonated Hydrogen

Q. What are the proportions of its constituents?

A. 2 of Carbon & 3 of Hydrogen

Q. When discovered?

A. 1796. By a Dutch Chemist

Q. How what is it prepared?

A. One part of Alcohol and 4 Concentrated Sulphuric acid heat being applied.

Q. What are its properties?

A. Colorless. inflammable. irrespirable - tasteless. inodorous. explodes with oxygen when burning gives a bright white blue light. The flame may be kept up while a stream of water passes through it.

Q. What is deposited in this last in
 stage?

A. Carbon. the hydrogen being taken up by
 oxygen or consumed.

Q. What is its Sp. gr.?

A. 97 or 98

12. Feb 44.

Q. Is this gas used for lighting Cities?

A. It is

Q. From what is it obtained for that purpose?

A. Bituminous Coal. Oil. & Rosin.

Q. Is there any other gases formed in
 procuring the Coal gas?

A. Some 8 or 10.

Q. What arrangements are made to rid
 the gas of the impurities?

A. Several washers through which the gas
 is conducted.

Q. What is the proportional value of Coal
 & oil gas?

A. The oil is double -

Phosphorus & Hydrogen

Q. What is proportion of the constituents
 of Phosphorated Hydrogen?

A. 2 of Phosphorus & 3 Hydrogen.

Q. What are some of its properties?

A. It is transparent, colorless - of
 sensitive odor & bitter taste

Q. What is its Sp. gr.?

A. 1.85.

Q. Does it require care and caution in
 its preparation?

Yes Sir.

Q. Why?

A. Because it explodes when it comes in contact with atmospheric air.

Q. What is put in the retort to prevent that?

A. Sul. Ether.

Q. From what is it obtained?

A. Take hydrous hypophosphorous acid, strong hydrochloric acid, & phosphuret of Calcium & apply heat.

Cyanogen. Gas

Q. What are its constituents?

A. 2 proportions of Carbon & one of Nitrogen.

Q. By whom and when discovered?

A. Gay Lussac 1815.

Q. What is it according to the present nomenclature?

A. A bicarburet of Nitrogen.

Q. How is obtained?

A. From the bicarburet of Mercury by the application of heat.

Q. Is it important that the material be dry?

A. It is.

Q. Why?

A. Because it readily unites with hydrogen of the moisture.

Q. What are some of its properties?

A. It is colorless, pungent odor, inflammable, burns with a purple flame.

Q. What is its sp. gr.?

A. 1.85.

2 Does it combine readily with elementary substances?

A. It does

Prussic Acid

2 What is it?

A. Hydrocyanic acid. a combination of Cyanogen and Hydrogen -

2 What materials are used in its preparation?

A. 1. Cyanuret of Mercury 3. Hydrochloric acid 2.

2 By what ^{are} the impurities removed?

A. Powdered marble - and the Chloride of Calcium.

2 What are some of its properties?

A. When condensed it is a colorless fluid, limpid - odor resembles peach blossom odor - acid flavor is weak. gives a cooling sensation to the tongue first; afterward burns. It decomposes soon after it is formed.

2 What effect has water upon it?

A. Water prevents the decomposition for some time.

2 What is the Antidote for Prussic acid?

A. Aqua Ammonia - or better a solution of Chlorine gas in water.

2 Is there any danger in preparing this gas?

A. Great. For a small quantity will impregnate of large room, and especially in hot weather

Metals

Q How many metals are there?

A 42.

Q What are the properties of metals?

A. A. peculiar lustre, good conductors of heat & Electricity. Malleable under all circumstances. Reflect light, they are separated from their combinations by a blow.

Q Which is the heaviest metal?

A Platinum

Q Which are the lightest?

A Sodium and Potassium.

Q Which are the metallic bases of the alkalis?

A Potassium, Sodium & Lithium.

Q — Of the alkaline earths?

A. Barium, Strontium, Calcium, &

Magnesium

Potassium

Q When and by whom discovered?

A. 1807. By Davy.

Q From what may it be obtained?

A. The Carbonate of Potassa with $\frac{1}{2}$ its weight of powdered Charcoal, being exposed to a strong heat, in an iron bottle.

Q. What is its form at ordinary temperatures?

A Solid, but varies with the degree of heat to which it is subjected.

Q What is potassa

A An oxide of potassium.

Q What is the Caustic potassa of

Potassa

49.

the shops?

A. It is a hydrate of Potassa.

Q. What is salts of Tartar
A. Carbonate of Potassa.

Q. What is its antidote

A. Common vinegar -

Q. What is Sal aeratiss

A. An impure bicarbonate of Potassa.

Q. How is the bicarbonate prepared.

A. Pass a current of Carbonic acid through a solution of the Common Carbonate.

Q. What should be used with it when it is employed in bread?

A. Butter-milk.

Q. How may the Sulphate of Potassa be prepared?

A. From the Carbonate by the action of Sulphuric acid.

Q. What are some of its properties?

A. Taste saline and bitter. It crystallizes decahydrates under heat.

Q. In what preparation of medicine is it used?

A. As arore Powders.

Q. Is it preferable to the nitrate?

A. It is.

Q. Why?

A. One reason is it disintegrates the albumen more perfectly.

Q. How is the nitrate prepared.

A. It is prepared differently in differ

Potassa — Potassium

ent place in France from the plastering of old houses.

Q. What are some of its properties?
A. Colorless salt, crystallized, soluble in 7 parts of water.

Q. Into the composition of ^{what} article of Commerce does it enter?

A. Gunpowder.

Q. What are the other constituents of Gunpowder?

A. Sulphur and Charcoal.

Q. How is the Chlorate of Potassa formed?

A. By passing Chlorine gas through a solution of pure Potassa.

Q. For what is it sometimes used?

A. Making fulminating powders.

Sodium. Feb 12 1845

Q. What is called among the Germans?

A. Natrium.

Q. When was it discovered?

A. 1807. by Davy.

Q. Give the properties?

A. Strong metallic lustre - color anal-
ogous to silver - it is soft at com-
mon temperatures.

Q. What is the sp. gr.?

A. 972.

Q. Has it strong affinity for oxygen?

A. It has, but not as strong as
Potassium -

Q. Does it inflame on the surface of

cold water?

A It does not.

Q Does it on Hot water?

A Yes Sir.

Q What is the Color of the Flame?

A Yellow.

Q What is the first Combination with oxygen?

A The Protoxide

Q What is it called?

A Soda.

Q Is it similar to Potassae?

A It is in its properties and combinations.

Q What is the soda of Commerce?

A A carbonate or bicarbonate.

Q Are its salts soluble?

A They are.

Q How is the liqueur formed?

A When sodium is heated in an excess of oxygen.

Chloride of Sodium

Q What is its common name?

A Salt.

Q What are the constituents of Salt?

A Chlorine and Sodium.

Q How is obtained

A From salt waters - Ocean and springs and lakes.

Q What is the sulphate of Soda?

A Glauber Salts

Q. Is it abundant in nature?

A. It is.

Q. How does it occur mostly? Under the name of Red & Brown Hematites.

Q. What is the difference between the Red & Brown Hematite?

A. The Red is anhydrous but the Brown is hydrated.

Q. What is the sp gr of each?

A. Brown about 4.9. Red 5.2.

Q. What are its combinations with Oxygen?

A. The protoxide & the peroxide.

Q. What is the specular oxide?

A. Iron 3. Oxygen 3 with or without water.

Q. What is the diagnostic ore?

A. Black oxide composed of the Protoxide & the Peroxide of iron.

Q. How much iron is in the Carbonate?

A. 5 to 10 per centum.

Q. What is Cast iron?

A. Iron & Charcoal.

Q. What is the Green vitriol?

A. The Proto-sulphate of iron. *Coppras.*

Q. For what is Sulphate of the peroxide of iron in an excess of the bicarbonate of Soda an ~~ex~~ antidote?

A. Arsenic

Q. What is the test for Iron?

A. The ferri-oxide of Potassa.

Q. Is the carbonate of much importance?

A. It is used in medicine - But it was not described particularly.

(Lead)

55.

Q What is the sulphuret of lead called?

A Galena.

Q Is it found in mines?

A It is.

Q What metal is almost always combined with it?

A Silver.

Q What is its sp. gr.

A 11.3.

Q Is it readily oxydized?

A It is.

Q What is massicot?

A Protoxide of Lead.

Q When massicot is partially fused what is it then called?

A Litharge.

Q What is the test of Lead?

A Sulphuretted Hydrogen.

Q What effect has heat on the Protoxide of Lead?

A. It turns red and cooled again as before a lemon-yellow.

Q How is the Nitrate of Lead formed?

A By the action of nitric acid on litharge.

Q What is white Lead?

A A Carbonate.

Q How is Sugar of Lead formed?

A By the action of acetic acid on litharge.

Q What is its antidote?

A Emetics & Salts. This forms sulphate of lead which is inactive.

54. Grad. — Copper

Q For what is the oxide of lead used?

A Its fine yellow hue.

Copper

Q With O₂ what does it form?

A Bronze

Q What is the color of its flame?

A Green.

Q Does it exist in many forms?

A It does.

Q How ^{the nitrate of copper} does it act upon the metals?

A It does if moist. enveloped in tin foil it makes a spark consuming the metal.

Q What is its test of the sulphate.

A Ammonia.

Q What is the sulphate of Copper?

A The Blue vitriol of Commerce

Mercury.

Q What is its form?

A Fluid.

Q At ^{what} temperature does it become solid

A 40° below zero.

Q From what is it mostly obtained?

A Cinnabar or the sulphuret.

Q What effect has its vapor on the system?

A Produces ptyalism.

Q What is its combination with oxygen

A Protoxide.

Q How is it formed

A By rubbing Calomel and Potassa

Mercury.

55.

together this ^{is} impure and may be used
pure—

Q. Then this is a good test for Calomel
is it?

A. Yes Sir.

Q. What is the Sulfide?

A. The peroxide = Red Precipitate of
Mercury.

Q. What are the constituents of the Pro-
to sulphuret?

A. One of Mercury and Sulphur, and
when these are rubbed together the
Compound results.

Q. What is the Proto sulphuret of Mer-
cury?

A. Quinac mentioned above. and
the vermilion of Commerce

Q. How formed?

A. By subliming the black oxide—

Q. How is the peroxide formed?

A. By Nitric acid 3. Water 5. and excess
of mercury.

Q. By what is it precipitated?

A. The alkalis

Q. Peroxide, what is its precipitate?

A. an hydrate of a dirty yellow—

Q. From ^{what} may the Corrosive sublimate
be made?

A. By heating Mercury in Chlorine
gas.

Q. Is it poisonous?

A. It is—

Arsenic.

Q What is the antidote?

A Carbonate Potassa, White of egg, starch, or flour.

Q What is its chemical name?

A Bichloride, or dutochloride.

Q What is Calomel?

A Commonly considered a proto-chloride.

Q What is it more properly?

A a subchloride of mercury.

Q Are there not some combinations of iodine & mercury?

A Yes Sir

Q Name some that were mentioned?

A Protoiodide & Bimiodide.

Arsenic.

Q What is the first test of arsenic?

A The garlic odor when heated.

Q How may it be detected in any article suspected to contain it?

A Take Black Flux 3 parts & one of the suspected article put them in a small glass tube apply heat. And the arsenic will be seen upon the sides of the tube

Q Give another test.

A Take two Copper plates make them concave, place between them the matter suspected. Bind them together and then expose them to heat and the arsenic will be separated.

Arsenic

57

Q. What does the sulphurated Hydrogen form with arsenic?

A. Bisulphuret - it is yellow.

Q. What does the Ammonio Sulphate of Copper form with Arsenic?

A. A beautiful green.

Q. What with the Ammonio Sulphate of Silver?

A. The Arsenite of Silver.

Q. What is the best and last test?

A. The arseniated Hydrogen gas?

Q. How is this Conducted?

A. Take a vessel with two tubes place in it zinc and dilute Sulphuric acid by which hydrogen gas is generated into this vessel the suspected matter is placed, and the arsenic passes out with the hydrogen and burned the arsenic is deposited on a plate held over the flame. and beside this there is a small green flame seen in the Centre of the flame of the Hydrogen.

Q. What is the antidote of arsenic?

A. Hydrated peroxide of ~~Iron~~ Iron.

Q. What Preparation of arsenic is used as medicine?

A. Fowler's Solution

Animal Heat -
^{one}

Q = Mention ~~some~~ ^{one} of the Theories
of animal heat -

A = Formed in the Lungs.

Q = What objection to this theory.

A = If this theory was correct. The
Lungs ought to be the hottest
part of body - which is not the
case -

Q = What other objections to this
theory.

A = The body is a bad conductor
of heat and ~~therefore~~ ^{therefore} therefore
could not be propagated.

Q = What other theory is there.

A = That the nervous system prevails
over and regulates ^{and} ~~supplies~~ ^{supplies} the
animal heat -

Q = What theory did Dr. Meigs
advance -

A = That all the agents were taken
into lungs and stomach and
carried by iron of blood to all parts
~~and~~

The end of February
of this year 1834
written by

a is yellow

13

Thomas Dorrrell
Thomas Dorrrell

7 J.

Oh! think of me when stars are burning
I will think of you when once again.
I think oh think of me when Dr & H. Hol-
Holcombe I think of thee at _____ come
of (January) 21 1854 San Francisco
Alabama ~~myself~~ small
think of me
quency some N.E. & Shirling Eve
S. 1 Starling Co.

S. Laband June 10-1834
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 Dr. June 6th Augusta Ga. I think of
 that when
 R. W. E.

John H. Brown

I remember Thee
I will remain

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 for my kindness for
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Chapter 14 - Diseases of the Brain - Diagnosis
Synopsis
Chapter 15

Wash
Lester
Gopin

Dr

Dr Joseph
Smith

I January 31st 1838



Babies

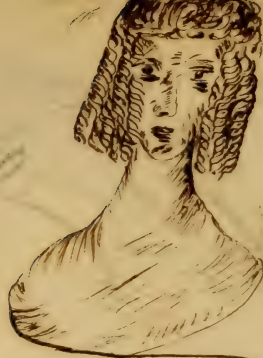
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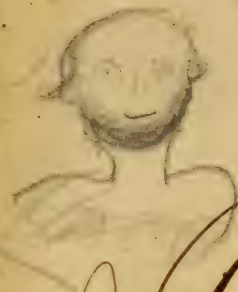
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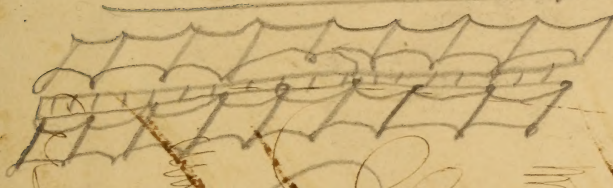
Thomas Burdell

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Patent

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W. A. ...

Palma Augusta

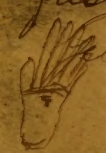
Joseph

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Professor of Anatomy

Joseph

make to France

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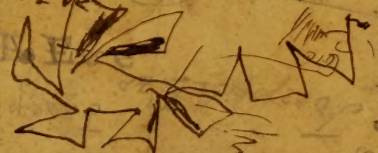
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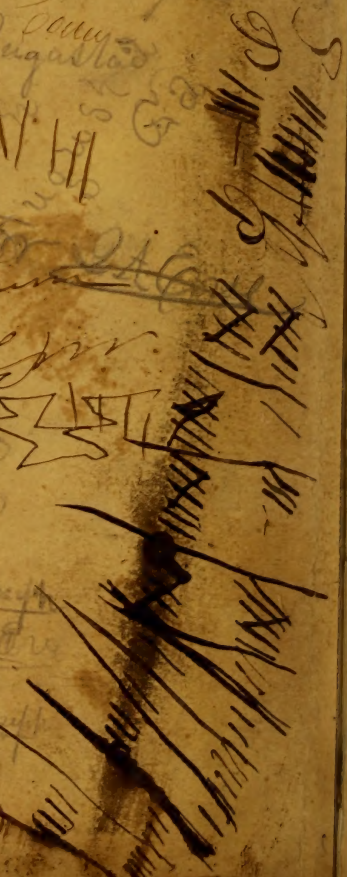
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Joseph A. Eve



Lecture on Anatomy



Melodrama

Melodrama

Sampson A E

Medacamentum

Medacamentum

Malena

Scotland

France Scotland

England

Ireland

Medacamentum

Dr Joseph A. Eve

Augusta Ga

Dr Thomas

Dr

